



ALLEGHENY COUNTY CLEAN AIR NOW

c/o Community Presbyterian Church of Ben Avon 7501 Church Avenue Pittsburgh, PA 15202

March 14, 2022

Group Against Smog & Pollution
1133 South Braddock Avenue
Suite 1A
Pittsburgh, PA 15218

Dear Group Against Smog & Pollution:

Allegheny County Clean Air Now (ACCAN) was founded in June, 2014 to give a voice to the residents living downwind from the DTE Energy's Shenango Coke Plant on Neville Island. The coke plant closed in 2016; however, with 27 pollution sources remaining in the Neville Island airshed, ACCAN began to focus on other polluters in the airshed. In 2018, ACCAN learned that Emsworth residents were complaining about air pollution and explosions from Neville Metals/Neville Recycling, aka Metalico, across the Ohio River on Neville Island. In 2018, with the help of CMU's CREATE Lab, ACCAN deployed a camera that provides 24/7 documentation of the industrial pollution from Metalico that harms residents' health and the environment.

In addition to the camera, ACCAN has a network of five outdoor tVOC monitors located at residents' homes in the Neville Island airshed. In addition, our partner, ROCIS (Reducing Outdoor Contaminants in Indoor Spaces), has five outdoor PurpleAir monitors at residents' homes in the airshed.

We will bring our experience monitoring industries in our airshed with visual observation and using tVOC and PurpleAir monitors to GASP's process of designing the enhanced monitoring project. That experience will also enable us to participate in the implementation of the project in our airshed. Specifically, ACCAN will identify residents willing to host monitors at strategic locations in the airshed and work with project staff to evaluate performance.

ACCAN developed its network of tVOC monitors with assistance from its partner, CMU's CREATE Lab, which hosts readings from these monitors at voc.createlab.org. Through its local network, ACCAN was able to identify residents in different areas of the airshed, who were willing to host the monitors. If GASP is successful in securing EPA funding for enhanced monitoring, ACCAN would recruit additional residents to host tVOC monitors.

The network of PurpleAir monitors in our airshed came out of ACCAN's partnership with ROCIS. ACCAN was interested in making it easier for residents in our airshed to access ROCIS services, which includes interventions to help residents improve their indoor air quality. ACCAN was able to secure grant funding that pays all or part of the cost of those interventions. When clients are interested in doing long term monitoring of their outdoor air quality, ROCIS leaves a PurpleAir monitor at the location. In this way we were able to benefit from a network of PurpleAir monitors in our airshed, in addition to our network of tVOC monitors. Expansion of this network of PurpleAir monitors would be done through ROCIS' ongoing program and through ACCAN identifying residents from its network who were willing to host monitors.

ACCAN will build on its current efforts and new initiatives in order to inform the proposed air sampling program to figure out what exactly is in the air that people are breathing. Historically, residents from all the communities complained of odors and pollution, but had no information about the nature or dangers of the pollution. This type of monitoring can help us determine what we've all been exposed to. ACCAN's current efforts focus on use of a CREATE Lab camera and personal observations to report air pollution from a particularly problematic source, Metalico on Neville Island. The camera provides visual evidence and the personal observations provide evidence of odors, in addition to visual evidence. Both of these types of evidence are used to submit complaints to the Allegheny County Health Department. This monitoring of Metalico, as well as data from our air monitors in other locations in the Neville Island airshed, can help identify when Summa Canisters should be deployed.

As a new initiative, ACCAN plans to market the SmellPGH app to residents in our airshed. While this app is used by a number of residents in other parts of Allegheny County, not many residents in the Neville Island airshed use it. SmellPGH is very useful in identifying where residents are experiencing industrial odors and can help ACHD target its monitoring efforts. It can also help identify where and when Summa Canisters should be deployed.

Over the years, ACCAN has been successful in getting residents to public meetings to disseminate information about local air pollution and ACCAN's efforts to get better regulation and also to give residents an opportunity to speak about their personal experiences and air their concerns. ACCAN has used its connections with local churches and libraries and tabling at community events to get the word out about meetings and to disseminate information.

If GASP is successful in securing EPA funding for enhanced monitoring, ACCAN would (1) recruit additional residents to host outdoor air monitors at strategic locations in the Neville Island airshed expanding our Airviz tVOC monitor network from five to twelve and our PurpleAir PM monitor network from seven to fourteen; (2) work to expand the use of Smell PGH in our airshed; (3) use data from the air monitors, Smell PGH reports

and odor reports from residents to help identify when Summa Canisters should be deployed; (4) over the grant period have some of our volunteers trained in maintaining the air monitors; (5) closely track the data from the monitors in our airshed and participate in the reporting of the data for the grant; (6) hold public meetings to disseminate information about the monitoring project and gather public input; and (7) use tabling at community events to further inform the public about the project.

Sincerely,

Karen Grzywinski, President

Allegheny County Clean Air Now (ACCAN)

k.a.b.grzy@gmail.com/412-443-3066

Uptown Partners
445 Fort Pitt Blvd
Suite #240
Pittsburgh PA 15219

Mr. Patrick Campbell, Executive Director
Group Against Smog & Pollution (GASP)

1133 South Braddock Avenue
Suite 1A
Pittsburgh, PA 15218

March 4, 2022

Dear Mr. Patrick Campbell:

Uptown Partners of Pittsburgh (UP) was founded in 2007 as a non-profit organization of residents, institutions, business owners and other concerned stakeholders to improve community quality of life — and to collaboratively create a vision and pathway for Uptown's much-needed revitalization. Our demographic majority is African American (32.2%) and we are a historically underserved and redlined community with a median household income of \$23, 603 and a vacancy rate of 32%. Industrial and mobile sources of pollution physically define our edges.

We express support for the the Grant Application "Ambient Air Monitoring and Air Sampling Project to Estimate Hazardous Air Pollutant (HAP) Emissions, Leveraging Crowd - Sourced Odor Reporting and Community - Owned Monitoring Networks" and are committed to supporting the project as a partner in the Birmingham/Uptown Group of which both our organizations are a part; working toward pollution identification and community engagement and education over the past year. We recognize that this award would increase much needed capacity for us to continue altogether and build upon the work done to date. We see the monitors and samples as a catalyst for community engagement and a critical tool for lending credence to our local lived experience. While we know our air quality is poor, we need to know what is in it - both to better address and stop it, and to guard our health and adequately understand and address adverse conditions that may be correlated with it.

With an eye toward environmental justice for its residents, Uptown Partners is working with the City of Pittsburgh, our community and institutions, Port Authority of Allegheny County, the Urban Redevelopment Authority, Green Building Alliance, Oakland Planning & Development Corp., and other interested stakeholders in a unique public/private planning initiative, embodied in the Uptown/West Oakland Ecolnnovation District plan.

Air Quality is a key focal area in the EcoInnovation Plan and we have committed to doubling down on this aspect of it as a key area in our 2022 WorkPlan, acknowledging air quality has a tight link with community health and environmental justice. The decision was informed in part by our work over the last year with the Birmingham/Uptown Group as we began to understand more about the nature of our smell events.

Our sources of concern include a high production asphalt plant , a concrete plant and a steel rolling and coating facility. We have also identified other localized pollution concerns, including mobile source pollution, idling commercial vehicle hotspots and construction related pollution as well as street paving; all types of pollution poised to increase significantly in the coming years with the construction of Bus Rapid Transit and a host of new proposed commercial and residential developments. As well, the asphalt plant is now requesting a permit renewal with increased annual tonnage and less air quality monitoring requirements.

An award to GASP would help our Birmingham/Uptown Group bring much of the groundwork to fruition as we have started confirming and recording lived smell experiences in various ways, identifying hosts and locations for monitors and sampling, installing one monitor, paying attention to another existing one put up by a local University previously, and meeting regularly with each other to build a strategy to get the attention and action of the local regulatory body and the polluters. One of the challenges we have is to speciate our findings and to better tie the pollution back to its sources. This grant would help solve that challenge and potentially empower our voice through science.

We expect to continue with our supportive work through this project, allowing speakers and partners to share information on air quality and pollution with our residents at our regular meetings, scheduling special sessions, enlisting more people in the community to engage with the data, and to record on the ground real-time observations, including photographically, through SmellPgh app use and Allegheny Health Department written complaints with more understanding and detail. We can disseminate regular updates to our residents, and offer sessions whereby they will have a chance to review data, ask questions, notice patterns and formulate action steps and catalyze business and regulatory action as needed.

Specifically, we hope to use the findings from the monitors and sampling as a powerful tool for outreach and education around air quality for our residents and the broader community and to gain their input to inform the design and performance of this project as it unfolds.

We are confident we can leverage our deep experience in community based work and skilled outreach to engage our broad networks to provide these inputs and share results with an array of people, including political, non-profit, real estate and corporate sectors throughout the City and even county and region. We have broad attention due to our nationally recognized EcoInnovation District Plan and our reach extends far beyond the Pittsburgh area.

Sincerely,

Christine Graziano



Kate O'Brien

Director of Mercy Service

P: 412.578.8778

E: kaobrien@carlow.edu

3333 FIFTH AVENUE, PITTSBURGH, PA 15213

Group Against Smog & Pollution
1133 South Braddock Avenue
Suite 1A
Pittsburgh, PA 15218

March 23, 2022

Dear Group Against Smog & Pollution:

Carlow University's Office of Mercy Service supports the Grant Application "Ambient Air Monitoring and Air Sampling Project to Estimate Hazardous Air Pollutant (HAP) Emissions, Leveraging Crowd-Sourced Odor Reporting and Community - Owned Monitoring Networks" and is committed to the project.

Our office provides the Carlow University community with a collaborative base for community outreach, volunteer programs, and year-round service opportunities. Service and volunteer opportunities are continuously updated and communicated to the Carlow community, raising awareness of our community's challenges and needs, and showing our students the many ways they can help.

Over the last year, I have been participating in biweekly conversations around air quality with the Birmingham/Uptown group, facilitated by the Breathe Project. Our campus is close to numerous sources of pollution concern, including an asphalt production facility, concrete production facility, and steel rolling warehouse. We are also in close proximity to major roadways and an increasing number of construction sites for new multi-story developments, including one that will be coming online in the near future on our campus. The health and well-being of our diverse student population and our adjacent communities is a priority and learning about the issues we face presents a meaningful education and service opportunity.

As a result of those conversations, in the past year, with the help of Christine Graziano and the Breathe Project, and in collaboration with the Birmingham/Uptown group, we started to understand some of the pollution sources impacting our local environment through monitoring and sampling.

I have since convened and engaged varied students; from the Carlow Outdoor Club, from the Political Science Major, and from Tri-Beta (a biology honors society). As a result of our meetings and meeting with Christine, they have decided to approach Student Government to secure permission and funding for a small number of air monitors throughout our campus and surrounds and in strategic locations. Through this process, their eyes have been opened to the environmental challenges around them, deepening their understanding of environmental justice issues and community engagement and inspiring them to act and learn more.

An EPA award to the Birmingham/Uptown group would help us to further understand what is in our air, so that we can better assess pollution levels, trends, and impact near the most vulnerable populations, including on and around our campus - for example, at Our Sisters of Mercy residences (elderly population), pre-school, daycare and student residences, as well as in the neighboring community of W. Oakland - the latter an environmental justice designated

community and one that is sorely underserved. In general, monitoring our nearby construction sites, busy roadways, and the nearby asphalt, concrete, and steel rolling facilities is important to our health. I am committing to continuing this work with the students and the Birmingham/Uptown Group in the next years and to expanding the monitoring network in collaboration with all the community representatives in the Birmingham Group. Our students, staff, and faculty will willingly meet regularly together and with the B/U Group when appropriate and with CMU CREATELab to discuss reported data from the monitors and sampling. We will tie our learning to coursework in political science and any other classes. The students want to understand the capability of the SmellPgh app and increase the number of users by signing up additional users throughout on and off-campus residential living, sharing the work of this project at the same time. Many off-campus students live closer to the pollution sources of concern by the riverfront.

Outdoors Club students will have the opportunity to explore links between outdoor recreation and this project work and results and to traverse the pollution landscape by kayak to understand the connection between pollution of air and deposition in water. Tri-Beta students are committed to learning more about data analysis and to partnering with our students from the Political Science department to advocate for better air for all residents of West Oakland.

What we are learning will expand beyond our campus. We will partner with a Mercy affiliate on the South Side flats across from the asphalt plant on the other banks of the river to help them to also learn from our findings and to empower them. We will help them to install a monitor at their facility, too.

I am confident our robust student population and expansive networks can be leveraged to maximize any investment from the EPA in our work to use monitors and sampling as a catalyst for education, action, and change and to share our findings from this grant supported work broadly within our region and with other University colleagues and affiliates across the country.

Gratefully,



Kate O'Brien

Carnegie Mellon

Robotics Institute
5000 Forbes Ave., NSH 4629
Pittsburgh, PA 15213
Phone: (650) 575-1612

Group Against Smog & Pollution
1133 South Braddock Avenue
Suite 1A
Pittsburgh, PA 15218

Dear Group Against Smog & Pollution:

Carnegie Mellon University CREATE Lab writes to eagerly attest our commitment to partner in the “Ambient Air Monitoring and Air Sampling Project to Estimate Hazardous Air Pollutant (HAP) Emissions, Leveraging Crowd-Sourced Odor Reporting and Community-Owned Monitoring Networks”. For this project, CREATE Lab will maintain the SmellPGH application and website and engage stakeholders throughout the course of the project to support smell reporting data analysis on zip code and Allegheny County-wide scales. We will supply materials for events held to increase SmellPGH usership through the project. CREATE Lab will provide and maintain the Environmental Sensing Data Repository (ESDR) infrastructure service for aggregation of air monitor data, on which parts of this proposal depend. CREATE Lab will maintain websites, voc.createlab.org and environmentaldata.org as publicly accessible data access points throughout the course of the project. Lab staff will add new sensors acquired through the grant into these platforms, and iterate on platforms based on community and partner and government stakeholder feedback. CREATE Lab will spend approximately 20 hours/month engaging in strategic planning and community engagement, including supporting the creation of materials for 2 data reports per year throughout the length of the project. This may entail developing systematized methods for viewing TO-15 air sample analysis, next to air monitoring data, and health and odor data recorded by the community. CREATE Lab will engage partners in the project and create tailored analyses and visualizations that can enhance reports, such as forward dispersion and back trajectory modeling. CREATE Lab will spend approximately 5 hours/month supporting the community-owned monitoring networks and air sampling technology in the Neville Island area on behalf of our community-based partner organization, Allegheny County Clean Air Now (ACCAN).

We are excited to build upon years of collaboration with GASP and the other partner organizations for this project. We have worked together to engage community-based organizations and respond to needs to make monitoring data and monitoring locations publicly accessible information, interpret, and contextualize air pollution data, and to generally be reliable partners to the environmental advocacy efforts we support. We see this project as a continuation of that work and are very hopeful for the opportunity to expand and enhance our current scope.

Thank you for submitting this application for funding under the EPA-OAR-OAQPS-22-01 Enhanced Air Quality Monitoring for Communities Grant.

Sincerely,



Ana Tsuhlares Hoffman she/her
Director of Air Quality Engagement
Carnegie Mellon University CREATE Lab



Three Rivers Waterkeeper
PO Box 97062
Pittsburgh, PA 15229
3RWK.org

March 24, 2022

Group Against Smog & Pollution (GASP)
1133 South Braddock Avenue
Suite 1A
Pittsburgh, PA 15218

Re: Project “Ambient Air Monitoring and Air Sampling Project to Estimate Hazardous Air Pollutant (HAP) Emissions, Leveraging Crowd - Sourced Odor Reporting and Community - Owned Monitoring Networks”

Dear Mr. Campbell:

Three Rivers Waterkeeper is a committed and supportive partner to the work of the Birmingham/Uptown community project aimed at addressing pollution sources of concern in the area. GASP has been a contributing and supportive partner to that work throughout the last year and is a leader in our region in protecting our regional air quality. It has been a pleasure to work together.

Three Rivers Waterkeeper (3RWK) was founded in 2009 and aims to improve and protect the water quality of the Allegheny, Monongahela, and Ohio Rivers. These waterways are critical to the health, vitality, and economic prosperity of our region and communities. Our mission is to protect the water quality of the Monongahela, Allegheny, and Ohio Rivers, and their respective watersheds with a vision to have drinkable, fishable, swimmable waters. 3RWK is both a scientific and legal advocate for the community, working to ensure our water quality is protected.

We believe that air pollution and water pollution are tightly linked as deposition of pollution from the air contributes directly to water health through runoff and direct deposit. As information is collected and analyzed about the sources of pollution in the Birmingham/Uptown area and throughout other communities supported by this grant, we will utilize the information to help design our water sampling regimes to mirror the locations of known air pollution sources.

We are already, based on the work of the group in the last year and that of ACCAN around and near Neville Island, planning to sample adjacent to these industrial pollution sources of concern. We are also committed to working in reverse, to share our water quality data with the air quality focused partners in this proposal to help them better identify the range of impact from any given source.



Three Rivers Waterkeeper
PO Box 97062
Pittsburgh, PA 15229
3RWK.org

Our wide-ranging relationships position us well to help our partners identify hosts and best sites for monitors and sampling locations. Our relationships throughout the river valleys can help us to easily share findings from the work of this project and to help engage communities along the river's edge and to help educate and empower action relative to the relationship between air and water quality and community health. We believe our role provides a bridge to an expanded audience and can magnify the impact of this project significantly both within the general population and the regulatory community.

We appreciate your consideration of this project and look forward to working with you.

Sincerely,

A handwritten signature in cursive script that reads 'Heather Hulton VanTassel'. The signature is written in dark ink and includes a stylized 'V' at the end.

Heather Hulton VanTassel, PhD
Executive Director, Three Rivers Waterkeeper

Preaward Compliance Review Report for All Applicants and Recipients Requesting EPA Financial Assistance

Note: Read Instructions before completing form.

I. A. Applicant/Recipient (Name, Address, City, State, Zip Code)

Name: Group Against Smog and Pollution, Inc.

Address: 1133 South Braddock Avenue
Suite 1A

City: Pittsburgh

State: PA: Pennsylvania

Zip Code: 15218

B. DUNS No. 014919195

II. Is the applicant currently receiving EPA Assistance? ☐ Yes ☒ No

III. List all civil rights lawsuits and administrative complaints pending against the applicant/recipient that allege discrimination based on race, color, national origin, sex, age, or disability. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7.)

None

IV. List all civil rights lawsuits and administrative complaints decided against the applicant/recipient within the last year that allege discrimination based on race, color, national origin, sex, age, or disability and enclose a copy of all decisions. Please describe all corrective actions taken. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7.)

None

V. List all civil rights compliance reviews of the applicant/recipient conducted by any agency within the last two years and enclose a copy of the review and any decisions, orders, or agreements based on the review. Please describe any corrective action taken. (40 C.F.R. § 7.80(c)(3))

None

VI. Is the applicant requesting EPA assistance for new construction? If no, proceed to VII; if yes, answer (a) and/or (b) below.

☐ Yes ☒ No

a. If the grant is for new construction, will all new facilities or alterations to existing facilities be designed and constructed to be readily accessible to and usable by persons with disabilities? If yes, proceed to VII; if no, proceed to VI(b).

☐ Yes ☐ No

b. If the grant is for new construction and the new facilities or alterations to existing facilities will not be readily accessible to and usable by persons with disabilities, explain how a regulatory exception (40 C.F.R. 7.70) applies.

VII. Does the applicant/recipient provide initial and continuing notice that it does not discriminate on the basis of race, color, national origin, sex, age, or disability in its program or activities? (40 C.F.R. 5.140 and 7.95)

☒ Yes ☐ No

a. Do the methods of notice accommodate those with impaired vision or hearing?

☒ Yes ☐ No

b. Is the notice posted in a prominent place in the applicant's offices or facilities or, for education programs and activities, in appropriate periodicals and other written communications?

☒ Yes ☐ No

c. Does the notice identify a designated civil rights coordinator?

☐ Yes ☒ No

VIII. Does the applicant/recipient maintain demographic data on the race, color, national origin, sex, age, or handicap of the population it serves? (40 C.F.R. 7.85(a))

☒ Yes ☐ No

IX. Does the applicant/recipient have a policy/procedure for providing access to services for persons with limited English proficiency? (40 C.F.R. Part 7, E.O. 13166)

☒ Yes ☐ No

- X. If the applicant is an education program or activity, or has 15 or more employees, has it designated an employee to coordinate its compliance with 40 C.F.R. Parts 5 and 7? Provide the name, title, position, mailing address, e-mail address, fax number, and telephone number of the designated coordinator.**

N/A

- XI. If the applicant is an education program or activity, or has 15 or more employees, has it adopted grievance procedures that assure the prompt and fair resolution of complaints that allege a violation of 40 C.F.R. Parts 5 and 7? Provide a legal citation or Internet Address for, or a copy of, the procedures.**

N/A

For the Applicant/Recipient

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law. I assure that I will fully comply with all applicable civil rights statutes and EPA regulations.

A. Signature of Authorized Official

Patrick Campbell

B. Title of Authorized Official

Executive Director

C. Date

03/25/2022

For the U.S. Environmental Protection Agency

I have reviewed the information provided by the applicant/recipient and hereby certify that the applicant/recipient has submitted all preaward compliance information required by 40 C.F.R. Parts 5 and 7; that based on the information submitted, this application satisfies the preaward provisions of 40 C.F.R. Parts 5 and 7; and that the applicant has given assurance that it will fully comply with all applicable civil rights statutes and EPA regulations.

A. *Signature of Authorized EPA Official

B. Title of Authorized Official

C. Date

*** See Instructions**

Instructions for EPA FORM 4700-4 (Rev. 06/2014)

General. Recipients of Federal financial assistance from the U.S. Environmental Protection Agency must comply with the following statutes and regulations.

Title VI of the Civil Rights Acts of 1964 provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. The Act goes on to explain that the statute shall not be construed to authorize action with respect to any employment practice of any employer, employment agency, or labor organization (except where the primary objective of the Federal financial assistance is to provide employment). Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act provides that no person in the United States shall on the ground of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under the Federal Water Pollution Control Act, as amended. Employment discrimination on the basis of sex is prohibited in all such programs or activities. Section 504 of the Rehabilitation Act of 1973 provides that no otherwise qualified individual with a disability in the United States shall solely by reason of disability be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Employment discrimination on the basis of disability is prohibited in all such programs or activities. The Age Discrimination Act of 1975 provides that no person on the basis of age shall be excluded from participation under any program or activity receiving Federal financial assistance. Employment discrimination is not covered. Age discrimination in employment is prohibited by the Age Discrimination in Employment Act administered by the Equal Employment Opportunity Commission. Title IX of the Education Amendments of 1972 provides that no person in the United States on the basis of sex shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance. Employment discrimination on the basis of sex is prohibited in all such education programs or activities. Note: an education program or activity is not limited to only those conducted by a formal institution. 40 C.F.R. Part 5 implements Title IX of the Education Amendments of 1972. 40 C.F.R. Part 7 implements Title VI of the Civil Rights Act of 1964, Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act, and Section 504 of The Rehabilitation Act of 1973. The Executive Order 13166 (E.O. 13166) entitled; "Improving Access to Services for Persons with Limited English Proficiency" requires Federal agencies work to ensure that recipients of Federal financial assistance provide meaningful access to their LEP applicants and beneficiaries.

Items "Applicant" means any entity that files an application or unsolicited proposal or otherwise requests EPA assistance. 40 C.F.R. §§ 5.105, 7.25. "Recipient" means any entity, other than applicant, which will actually receive EPA assistance. 40 C.F.R. §§ 5.105, 7.25. "Civil rights lawsuits and administrative complaints" means any lawsuit or administrative complaint alleging discrimination on the basis of race, color, national origin, sex, age, or disability pending or decided against the applicant and/or entity which actually benefits from the grant, but excluding employment complaints not covered by 40 C.F.R. Parts 5 and 7. For example, if a city is the named applicant but the grant will actually benefit the Department of Sewage, civil rights lawsuits involving both the city and the Department of Sewage should be listed. "Civil rights compliance review" means any review assessing the applicant's and/or recipient's compliance with laws prohibiting discrimination on the basis of race, color, national origin, sex, age, or disability. Submit this form with the original and required copies of applications, requests for extensions, requests for increase of funds, etc. Updates of information are all that are required after the initial application submission. If any item is not relevant to the project for which assistance is requested, write "NA" for "Not Applicable." In the event applicant is uncertain about how to answer any questions, EPA program officials should be contacted for clarification. * Note: Signature appears in the Approval Section of the EPA Comprehensive Administrative Review For Grants/Cooperative Agreements & Continuation/Supplemental Awards form.

BUDGET INFORMATION - Non-Construction Programs

OMB Number: 4040-0006
Expiration Date: 02/28/2022

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Enhanced Air Quality Monitoring for Communities	66.034	\$	\$	295,254.00	0.00	295,254.00
2.						
3.						
4.						
5. Totals		\$	\$	295,254.00	0.00	295,254.00

Standard Form 424A (Rev. 7-97)
Prescribed by OMB (Circular A -102) Page 1

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1)	(2)	(3)	(4)	
	Enhanced Air Quality Monitoring for Communities				
a. Personnel	\$ 33,112.00	\$	\$	\$	\$ 33,112.00
b. Fringe Benefits	0.00				0.00
c. Travel	0.00				0.00
d. Equipment	106,490.00				106,490.00
e. Supplies	84,850.00				84,850.00
f. Contractual	0.00				0.00
g. Construction	0.00				0.00
h. Other	70,802.00				70,802.00
i. Total Direct Charges (sum of 6a-6h)	295,254.00				\$ 295,254.00
j. Indirect Charges	0.00				\$ 0.00
k. TOTALS (sum of 6i and 6j)	\$ 295,254.00	\$	\$	\$	\$ 295,254.00
7. Program Income	\$ 0.00	\$	\$	\$	\$ 0.00

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SECTION C - NON-FEDERAL RESOURCES					
(a) Grant Program		(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS
8.	Enhanced Air Quality Monitoring for Communities	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
9.					
10.					
11.					
12. TOTAL (sum of lines 8-11)		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ 295,254.00	\$ 121,649.00	\$ 121,648.00	\$ 25,979.00	\$ 25,978.00
14. Non-Federal	\$ 0.00	0.00	0.00	0.00	0.00
15. TOTAL (sum of lines 13 and 14)	\$ 295,254.00	\$ 121,649.00	\$ 121,648.00	\$ 25,979.00	\$ 25,978.00

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT					
(a) Grant Program		FUTURE FUNDING PERIODS (YEARS)			
		(b)First	(c) Second	(d) Third	(e) Fourth
16.	Enhanced Air Quality Monitoring for Communities	\$ 295,254.00	\$ 102,264.00	\$ 102,263.00	
17.					
18.					
19.					
20. TOTAL (sum of lines 16 - 19)		\$ 295,254.00	\$ 102,264.00	\$ 102,263.00	

SECTION F - OTHER BUDGET INFORMATION	
21. Direct Charges: \$295,254.00	22. Indirect Charges: \$0
23. Remarks: All equipment and supplies are purchased during Q1 and Q2 of Project Year 1.	

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Other Attachment File(s)

* Mandatory Other Attachment Filename:

[Add Mandatory Other Attachment](#)

[Delete Mandatory Other Attachment](#)

[View Mandatory Other Attachment](#)

To add more "Other Attachment" attachments, please use the attachment buttons below.

[Add Optional Other Attachment](#)

[Delete Optional Other Attachment](#)

[View Optional Other Attachment](#)

Project Narrative File(s)

* Mandatory Project Narrative File Filename: 1253-Final_RFP EPA-OAR-OAQPS-22-01.docx.pdf

Add Mandatory Project Narrative File

Delete Mandatory Project Narrative File

View Mandatory Project Narrative File

To add more Project Narrative File attachments, please use the attachment buttons below.

Add Optional Project Narrative File

Delete Optional Project Narrative File

View Optional Project Narrative File

Application for Federal Assistance SF-424

* 1. Type of Submission:

- ☐ Preapplication
☒ Application
☐ Changed/Corrected Application

* 2. Type of Application:

- ☒ New
☐ Continuation
☐ Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received:

03/25/2022

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name:

Group Against Smog and Pollution, Inc

* b. Employer/Taxpayer Identification Number (EIN/TIN):

200011194

* c. Organizational DUNS:

0149191950000

d. Address:

* Street1:

1133 South Braddock Avenue

Street2:

Suite 1A

* City:

Pittsburgh

County/Parish:

Allegheny

* State:

PA: Pennsylvania

Province:

* Country:

USA: UNITED STATES

* Zip / Postal Code:

15218-1286

e. Organizational Unit:

Department Name:

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:

* First Name:

Patrick

Middle Name:

* Last Name:

Campbell

Suffix:

Title:

Executive Director

Organizational Affiliation:

Group Against Smog and Pollution, Inc.

* Telephone Number:

7244967783

Fax Number:

* Email:

patrick@gasp-pgh.org

Application for Federal Assistance SF-424

* 9. Type of Applicant 1: Select Applicant Type:

M: Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education)

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

* 10. Name of Federal Agency:

Environmental Protection Agency

11. Catalog of Federal Domestic Assistance Number:

66.034

CFDA Title:

Surveys, Studies, Research, Investigations, Demonstrations, and Special Purpose Activities
Relating to the Clean Air Act

* 12. Funding Opportunity Number:

EPA-OAR-OAQPS-22-01

* Title:

Enhanced Air Quality Monitoring for Communities

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment

Delete Attachment

View Attachment

* 15. Descriptive Title of Applicant's Project:

Ambient Air Monitoring and Air Sampling Project to Estimate Hazardous Air Pollutant (HAP)
Emissions, Leveraging Crowd-Sourced Odor Reporting and Community-Owned Monitoring Networks

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

Application for Federal Assistance SF-424**16. Congressional Districts Of:**

* a. Applicant PA-018

* b. Program/Project PA-014

Attach an additional list of Program/Project Congressional Districts if needed.

1252-Congressional Districts.pdf

Add Attachment

Delete Attachment

View Attachment

17. Proposed Project:

* a. Start Date: 11/01/2022

* b. End Date: 10/31/2025

18. Estimated Funding (\$):

* a. Federal	499,781.00
* b. Applicant	0.00
* c. State	0.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	499,781.00

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- ☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .
- ☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- ☒ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment

Delete Attachment

View Attachment

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: * First Name: Patrick

Middle Name:

* Last Name: Campbell

Suffix:

* Title: Executive Director

* Telephone Number: 7244967783 Fax Number:

* Email: patrick@gasp-pgh.org

* Signature of Authorized Representative: Patrick Campbell * Date Signed: 03/25/2022



EPA KEY CONTACTS FORM

OMB Number: 2030-0020
Expiration Date: 06/30/2024

Authorized Representative: *Original awards and amendments will be sent to this individual for review and acceptance, unless otherwise indicated.*

Name:	Prefix:	<input type="text"/>	First Name:	<input type="text" value="Patrick"/>	Middle Name:	<input type="text"/>
	Last Name:	<input type="text" value="Campbell"/>			Suffix:	<input type="text"/>
Title:	<input type="text" value="Executive Director"/>					
Complete Address:						
Street1:	<input type="text" value="1133 South Braddock Avenue"/>					
Street2:	<input type="text" value="Suite 1A"/>					
City:	<input type="text" value="Pittsburgh"/>	State:	<input type="text" value="PA: Pennsylvania"/>			
Zip / Postal Code:	<input type="text" value="15218"/>	Country:	<input type="text" value="USA: UNITED STATES"/>			
Phone Number:	<input type="text" value="7244967783"/>			Fax Number:	<input type="text"/>	
E-mail Address:	<input type="text" value="patrick@gasp-pgh.org"/>					

Payee: *Individual authorized to accept payments.*

Name:	Prefix:	<input type="text"/>	First Name:	<input type="text" value="Patrick"/>	Middle Name:	<input type="text"/>
	Last Name:	<input type="text" value="Campbell"/>			Suffix:	<input type="text"/>
Title:	<input type="text" value="Executive Director"/>					
Complete Address:						
Street1:	<input type="text" value="1133 South Braddock Avenue"/>					
Street2:	<input type="text" value="Suite 1A"/>					
City:	<input type="text" value="Pittsburgh"/>	State:	<input type="text" value="PA: Pennsylvania"/>			
Zip / Postal Code:	<input type="text" value="15218"/>	Country:	<input type="text" value="USA: UNITED STATES"/>			
Phone Number:	<input type="text" value="7244967783"/>			Fax Number:	<input type="text"/>	
E-mail Address:	<input type="text" value="patrick@gasp-pgh.org"/>					

Administrative Contact: *Individual from Sponsored Programs Office to contact concerning administrative matters (i.e., indirect cost rate computation, rebudgeting requests etc).*

Name:	Prefix:	<input type="text"/>	First Name:	<input type="text" value="Patrick"/>	Middle Name:	<input type="text"/>
	Last Name:	<input type="text" value="Campbell"/>			Suffix:	<input type="text"/>
Title:	<input type="text" value="Executive Director"/>					
Complete Address:						
Street1:	<input type="text" value="1133 South Braddock Avenue"/>					
Street2:	<input type="text" value="Suite 1A"/>					
City:	<input type="text" value="Pittsburgh"/>	State:	<input type="text" value="PA: Pennsylvania"/>			
Zip / Postal Code:	<input type="text" value="15218"/>	Country:	<input type="text" value="USA: UNITED STATES"/>			
Phone Number:	<input type="text" value="7244967783"/>			Fax Number:	<input type="text"/>	
E-mail Address:	<input type="text" value="patrick@gasp-pgh.org"/>					

EPA KEY CONTACTS FORM

Project Manager: *Individual responsible for the technical completion of the proposed work.*

Name: **Prefix:** **First Name:** **Middle Name:**

Last Name: **Suffix:**

Title:

Complete Address:

Street1:

Street2:

City:

State:

Zip / Postal Code:

Country:

Phone Number:

Fax Number:

E-mail Address:

INTERNAL REVENUE SERVICE
P. O. BOX 2508
CINCINNATI, OH 45201

DEPARTMENT OF THE TREASURY

Date: **MAR 06 2008**

GROUP AGAINST SMOG AND POLLUTION
INC
5604 SOLWAY ST 204
PITTSBURGH, PA 15217-1268

Employer Identification Number:
20-0011194
DLN:
17053026732078
Contact Person:
GREGORY K OLWINE ID# 31382
Contact Telephone Number:
(877) 829-5500
Public Charity Status:
170(b)(1)(A)(vi)

Dear Applicant:

Our letter dated May 2003, stated you would be exempt from Federal income tax under section 501(c)(3) of the Internal Revenue Code, and you would be treated as a public charity, rather than as a private foundation, during an advance ruling period.

Based on the information you submitted, you are classified as a public charity under the Code section listed in the heading of this letter. Since your exempt status was not under consideration, you continue to be classified as an organization exempt from Federal income tax under section 501(c)(3) of the Code.

Publication 557, Tax-Exempt Status for Your Organization, provides detailed information about your rights and responsibilities as an exempt organization. You may request a copy by calling the toll-free number for forms, (800) 829-3676. Information is also available on our Internet Web Site at www.irs.gov.

If you have general questions about exempt organizations, please call our toll-free number shown in the heading.

Please keep this letter in your permanent records.

Sincerely yours,



Robert Choi
Director, Exempt Organizations
Rulings and Agreements

Letter 1050 (DO/CG)



March 23, 2022

Patrick Campbell, Executive Director
Group Against Smog and Pollution (GASP)
1133 S. Braddock Ave., Ste. 1A
Edgewood, PA 15218

Dear Mr. Campbell,

Please accept this letter of support from Valley Clean Air Now (VCAN) for the Group Against Smog and Pollution's (GASP) application to EPA for a Community Air Monitoring grant, and to confirm VCAN's participation as a partner in this project.

Valley Clean Air Now (VCAN) seeks to help residents of the Mon Valley by educating residents on how they can change their environment and protect their health. We want to obtain resources that will alleviate the health impacts of residents and equitably distribute them. The Mon Valley (in Allegheny County south of Pittsburgh) has both historically and currently been home to some of the largest industrial sources of pollution in the U.S., and residents have made cleaning up our air a top priority.





In 2020, VCAN with other organizations' support launched a pilot program to provide portable air cleaners in Clairton homes to reduce outdoor and indoor air pollution exposure. Our program helped illuminate the high numbers of residents concerned for their health and wanted tools to help them understand the air quality and help them address it.

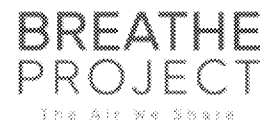
With the Mon Valley continuing to have some of the worst air quality in the nation on a regular basis, VCAN is supporting efforts to increase air monitoring in the Mon Valley. We want to hold public powers and private companies accountable for their responsibilities to uphold environmental protections. To do that, we hope to establish 12 new monitoring sites through the Mon Valley to collect better data on air quality and raise awareness with residents on how the reading affects them. This data will be instrumental to the continued work that VCAN needs to fight for our neighbor's right to clean air.

We appreciate the opportunity to work together and look forward to this project moving forward.

Sincerely,

Germaine Patterson
Clairton resident and VCAN Steering Committee member
germainegooden.gg@gmail.com





Matthew M. Mehalik, Ph.D.
Executive Director
Breathe Project
Energy Innovation Center
1435 Bedford Ave., Suite 140
Pittsburgh, PA 15219
412-514-5008
mmehalik@breatheproject.org
breatheproject.org

Patrick Campbell
Executive Director
Group Against Smog and Pollution
1133 South Braddock Avenue, Suite 1A
Edgewood, PA 15218

Dear Mr. Campbell:

On behalf of the Breathe Project, I would like to express our commitment to your EPA proposal and project, “Ambient Air Monitoring and Air Sampling Project to Estimate Hazardous Air Pollutant (HAP) Emissions, Leveraging Crowd-Sourced Odor Reporting and Community-Owned Monitoring Networks.”

The Breathe Project is collaboration of over 50 organizations in Southwestern Pennsylvania working together to improve our region’s poor air quality. Our collaborative network includes community organizations, public health experts, air quality scientists, monitoring technology experts, and environmental advocacy organizations. We use the best available science and technology to understand the quality of the air we breathe and provide opportunities for citizens to engage and act. As Executive Director of the Breathe Project, I am pleased to support this project because of the air quality benefits that it can bring to our region and its residents.

Allegheny County, and in particular the Monongahela Valley, has long been challenged by poor air quality, leading to unfavorable health outcomes for residents, environmental damage, and other negative implications for the quality of life in our region.

Our organization commits to this project access to the Breathe Project’s network of participants so that the project’s deployment as well as the results of the monitoring data can be widely supported and disseminated regionally. The staff of the Breathe Project will collaborate with the committed organizations in this proposal to connect its efforts to the wider Breathe Project network’s efforts to address ongoing environmental justice air quality and health issues in the Monongahela Valley through campaign support, earned media support, and in supporting responsible party accountability campaigns.

The Breathe Project is also the host to a community network that convenes community conversations in the Uptown and Birmingham communities in the City of Pittsburgh, both on the banks of the Monongahela River in the Monongahela Valley. We will continue to bring support to this community project for the purposes of supporting this grant's objectives.

The Breathe Project appreciates the efforts of Group Against Smog and Pollution in assembling this project. We will gladly supply additional information and analysis in support of this project relating to air quality matters in our region.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt M. Mehalik". The signature is fluid and cursive, with the first name "Matt" being more prominent than the last name "Mehalik".

Matthew M. Mehalik, Ph.D.
Executive Director
Breathe Project



March 23, 2022

Patrick Campbell, Executive Director
Group Against Smog and Pollution (GASP)
1133 S. Braddock Ave., Ste. 1A
Edgewood, PA 15218

Dear Mr. Campbell,

On behalf of Clean Water Fund's Pittsburgh office, I am pleased to send you this letter of support to confirm our partnership with the Group Against Smog and Pollution (GASP) and other air quality organizations in approaching EPA for a Community Air Monitoring grant. Clean Water Fund (CWF) has worked for over 25 years in the Pittsburgh area to improve local air quality through our mission of engaging with the community to address pressing environmental, health, and community needs.

CWF has worked in partnership with GASP on a number of past air quality related projects, including working to retrofit diesel buses serving Pittsburgh Public Schools. We look forward to working with you again on this effort to improve local knowledge of air toxics and other pollutants that continue to cause health problems for Allegheny County residents.

CWF has worked with community members in the Mon Valley for over the past decade to address the poor air quality that residents have been working to improve. CWF has held frequent community education programs in the Mon Valley, helped residents establish local community based committees, and engaged in past air monitoring projects that have involved both video monitoring of visible emissions and sampling for air toxics. CWF was instrumental in assisting Clairton area residents in establishing Valley Clean Air Now (VCAN), one of the other partners in this project.

CWF will utilize our skills in community engagement and in depth knowledge of Mon Valley communities to ensure that community concerns and goals for local air quality monitoring are integrated into the overall project. By holding regular community listening and reporting sessions in the Mon Valley, the project can result in being better informed about where to monitor, and how to present data to the community in a way that meets their needs. It is critical that the collection of new air monitoring data be shared in a transparent way with the community members who are most at risk from the adverse health impacts already being felt. This is especially true in the environmental justice communities such as Clairton, Glassport, and Duquesne that make up a significant portion of the Mon Valley.

PHILADELPHIA
1315 Walnut Street, Suite 1650
Philadelphia, PA 19107
Tel. 215.545.0250

PITTSBURGH
100 Fifth Avenue, Suite 1108
Pittsburgh, PA 15222
Tel. 412.765.3053

NATIONAL
1444 Eye Street NW, Suite 400
Washington, DC 20005
Tel. 202.895.0432

✉ @CleanH2OPA | 📘 Facebook.com/CleanWaterActionPA | www.cleanwater.org/pa



CWF has made a priority of engaging with environmental justice communities around pressing health concerns such as poor air quality. As part of that effort, CWF hired an Environmental Justice Organizer, Qiyam Ansari, two years ago to increase our capacity to conduct community outreach in the Mon Valley. Mr. Ansari is a Black resident who spent time growing up in the Mon Valley and still has family living there. His experience and history with the community that is a focus of this project is an important component to our ability to engage the community there.

We appreciate the opportunity to work together on this important effort, and look forward to the success of this project.

Sincerely,

A handwritten signature in black ink, appearing to read "Myron Arnowitz".

Myron Arnowitz
Pennsylvania Director

PHILADELPHIA
1315 Walnut Street, Suite 1650
Philadelphia, PA 19107
Tel. 215.545.0250

PITTSBURGH
100 Fifth Avenue, Suite 1108
Pittsburgh, PA 15222
Tel. 412.765.3053

NATIONAL
1444 Eye Street NW, Suite 400
Washington, DC 20005
Tel. 202.895.0432

✉ @CleanH2OPA | 📘 Facebook.com/CleanWaterActionPA | www.cleanwater.org/pa



445 Fort Pitt Blvd. Suite 240 Pittsburgh, PA 15219 412.742.4483

www.uptownpartners.org

Mr. Patrick Campbell, Executive Director
Group Against Smog & Pollution (GASP)

1133 South Braddock Avenue
Suite 1A
Pittsburgh, PA 15218

March 4, 2022

Dear Mr. Patrick Campbell:

Uptown Partners of Pittsburgh (UP) was founded in 2007 as a non-profit organization of residents, institutions, business owners and other concerned stakeholders to improve community quality of life — and to collaboratively create a vision and pathway for Uptown's much-needed revitalization. Our demographic majority is African American (32.2%) and we are a historically underserved and redlined community with a median household income of \$23, 603 and a vacancy rate of 32%. Industrial and mobile sources of pollution physically define our edges.

We express support for the the Grant Application "Ambient Air Monitoring and Air Sampling Project to Estimate Hazardous Air Pollutant (HAP) Emissions, Leveraging Crowd - Sourced O dor Reporting and Community - Owned Monitoring Networks" and are committed to supporting the project as a partner in the Birmingham/Uptown Group of which both our organizations are a part; working toward pollution identification and community engagement and education over the past year. We recognize that this award would increase much needed capacity for us to continue altogether and build upon the work done to date. We see the monitors and samples as a catalyst for community engagement and a critical tool for lending credence to our local lived experience. While we know our air quality is poor, we need to know what is in it - both to better address and stop it, and to guard our health and adequately understand and address adverse conditions that may be correlated with it.

With an eye toward environmental justice for its residents, Uptown Partners is working with the City of Pittsburgh, our community and institutions, Port Authority of Allegheny County, the Urban Redevelopment Authority, Green Building Alliance, Oakland Planning & Development Corp., and other interested stakeholders in a unique public/private planning initiative, embodied in the Uptown/West Oakland EcoInnovation District plan.

Air Quality is a key focal area in the EcoInnovation Plan and we have committed to doubling down on this aspect of it as a key area in our 2022 WorkPlan, acknowledging air quality has a tight link with community health and environmental justice. The decision was informed in part by our work over the last year with the Birmingham/Uptown Group as we began to understand more about the nature of our smell events.

Our sources of concern include a high production asphalt plant , a concrete plant and a steel rolling and coating facility. We have also identified other localized pollution concerns, including mobile source pollution, idling commercial vehicle hotspots and construction related pollution as well as street paving; all types of pollution poised to increase significantly in the coming years with the construction of Bus Rapid Transit and a host of new proposed commercial and residential developments. As well, the asphalt plant is now requesting a permit renewal with increased annual tonnage and less air quality monitoring requirements.

An award to GASP would help our Birmingham/Uptown Group bring much of the groundwork to fruition as we have started confirming and recording lived smell experiences in various ways, identifying hosts and locations for monitors and sampling, installing one monitor, paying attention to another existing one put up by a local University previously, and meeting regularly with each other to build a strategy to get the attention and action of the local regulatory body and the polluters. One of the challenges we have is to speciate our findings and to better tie the pollution back to its sources. This grant would help solve that challenge and potentially empower our voice through science.

We expect to continue with our supportive work through this project, allowing speakers and partners to share information on air quality and pollution with our residents at our regular meetings, scheduling special sessions, enlisting more people in the community to engage with the data, and to record on the ground real-time observations, including photographically, through SmellPgh app use and Allegheny Health Department written complaints with more understanding and detail. We can disseminate regular updates to our residents, and offer sessions whereby they will have a chance to review data, ask questions, notice patterns and formulate action steps and catalyze business and regulatory action as needed.

Specifically, we hope to use the findings from the monitors and sampling as a powerful tool for outreach and education around air quality for our residents and the broader community and to gain their input to inform the design and performance of this project as it unfolds.

We are confident we can leverage our deep experience in community based work and skilled outreach to engage our broad networks to provide these inputs and share results with an array of people, including political, non-profit, real estate and corporate sectors throughout the City and even county and region. We have broad attention due to our nationally recognized EcoInnovation District Plan and our reach extends far beyond the Pittsburgh area.

Sincerely,

A handwritten signature in black ink, appearing to read 'B. McDonald', with a stylized flourish at the end.

Dr. Brittany McDonald

Executive Director

Environmental Protection Agency (EPA)
Enhanced Air Quality Monitoring for Communities
FY 2022 Request for Proposals (RFP) EPA-OAR-OAQPS-22-01

Project Title	Ambient Air Monitoring and Air Sampling Project to Estimate Hazardous Air Pollutant (HAP) Emissions, Leveraging Crowd-Sourced Odor Reporting and Community-Owned Monitoring Networks						
Applicant Information	Group Against Smog & Pollution 1133 South Braddock Avenue Pittsburgh, PA 15218 Contact Person: Patrick Campbell, Executive Director Phone: (724) 496-7783 Email: patrick@gasp-pgh.org DUNS No. 041919195						
Set Aside	no set-aside						
Eligible Entity	Group Against Smog & Pollution (GASP) is a 501(c)(3) nonprofit organization working to improve air quality to protect human, environmental, and economic health in Southwestern Pennsylvania. GASP envisions a Southwestern Pennsylvania where everyone has healthy air to breathe everyday, residents understand the health and environmental impacts of air pollution, economic development preserves air quality, and businesses comply with up-to-date air quality permits and regulations, motivated by swift, robust enforcement.						
Project Partners (if applicable)	Allegheny County Clean Air Now (ACCAN), Karen Grzywinski; Birmingham/Uptown Clean Air Group, Christine Graziano; Breathe Project, Matthew Mehalik; Clean Water Fund, Myron Arnowitt; CREATE Lab, Ana Hoffman; Protect Elizabeth Township (PET), Scott Taylor; Valley Clean Air Now (VCAN), Germaine Gooden-Patterson						
Project Location	Monitoring networks and residents impacted from this project are located in the following zip codes that stretch from Donora, PA in the south of the Monongahela Valley to Neville Island, PA in the north: 15022, 15072, 15062, 15366, 15012, 15033, 15087, 15063, 15067, 15332, 15020, 15038, 15088, 15025, 15037, 15045, 15133, 15132, 15122, 15110, 15104, 15120, 15207, 15203, 15219, 15217, 15218, 15225, 15203, 15213. Community hubs for the project are based in 4 areas, Elizabeth Township, PA; Monongahela River Valley (Mon Valley) between Clairton and Braddock, PA; Pittsburgh, PA; Neville Island, PA.						
Air Pollutant Scope	Particulate Matter and Hazardous Air Pollutants (HAPs)						
Budget Summary	<table><tr><td>Funding Requested</td><td>Total Project Cost</td></tr><tr><td>\$499,781.00</td><td>\$499,781.00</td></tr></table>			Funding Requested	Total Project Cost	\$499,781.00	\$499,781.00
Funding Requested	Total Project Cost						
\$499,781.00	\$499,781.00						
Project Period	November 1, 2022 - October 31, 2025						
Short Project Description	This project aims to expand community-owned air monitoring networks, and speciate HAPs with TO-15 sampling to equip residents from across the region with hyper-local, accurate estimates of ambient air pollution exposure. It builds on crowd-sourced odor reporting data from over 1000 unique individual reporters in the SmellPGH app, and monitoring networks facilitated by community groups throughout the Southwestern Pennsylvania region						

Section 1. Project Summary & Approach (30 Points)

A. Overall Project (20 points)

The proposed monitoring project will take place in Allegheny County, Pennsylvania, an area famed for its industrial past and resultant poor air quality. Old and new emissions sources as well as the local topography play a role in continued bouts of poor air quality. The area still appeared on EPA's AirNOW list of top 10 worst air quality locations in the country 157 times since

"The kids are always sick with headaches, gastrointestinal pain, burning lungs and lethargy. Do you know the symptoms associated with exposure to smoke on a regular basis? All of the above!"
—SmellPGH 1661

March 9, 2021. Along the river valleys residents regularly smell noxious odors and complain of health problems associated with persistent air pollution.

Community groups working to improve air quality have been in the area for decades. To address odor issues, in 2017, the Carnegie Mellon University CREATE Lab launched the SmellPGH app for submitting odor reports to the Allegheny County Health Department (ACHD). Area residents have submitted 66,709 reports since inception of the app. In these reports, residents identify symptoms associated with air pollution exposure and describe their experiences.

Community-based organizations have built low-cost air sensor networks aimed at monitoring real-time trends for tVOC and PM2.5 levels. These community-owned monitoring networks have already placed at least 100 monitors in the project areas. Community data collection efforts have steadily increased, and crowdsourced knowledge is providing insights as multiple monitors in relation to one another providing validation throughout the network.

To supplement the low-cost sensor data, many households took copious notes, including hourly logs of air quality, weather conditions, personal health effects, and sensor performance. These networks have been integral to helping residents make decisions to mitigate their exposure to pollution, indicating whether a child needs to pack their asthma inhaler, or determining if it is time to turn on air purification systems or put off outdoor exercise.

Unfortunately, there are gaps in the community-owned monitoring network and it does not have the capability to identify HAP levels. Considering how often these monitors spike in coordination, and the volume of reports submitted regularly through the SmellPGH app, there is a clear and demonstrated need for accurate, publicly accessible HAP data that provides the community with more information about the specific HAPs they are being exposed to.

For this project we are seeking funding to expand community owned-monitoring networks and support data collection that speciates HAPs when odor reports and monitoring networks throughout the project area indicate high-pollution events. We will work with community-based organizations representing four localities in SWPA. These organizations have determined – through community interaction and emissions research – that accurate air quality sampling to speciate chemical components during peak air pollution events is necessary to inform the public about potentially harmful exposures to air toxics. These expanded networks and enhanced data outputs will assist organization leaders to connect air quality monitoring and sampling data to their communities' health concerns. Organizations will educate concerned residents and engage government stakeholders with more accurate community-led science.

The community-based organizations partnering in this proposal are Allegheny County Clean Air Now (ACCAN), Birmingham/Uptown Clean Air Group (BUG), Protect Elizabeth Township (PET), and Valley Clean Air Now (VCAN) all representing their home neighborhoods. **The project will create a lasting, expanded monitoring network, resulting in more constructive ways to engage with government stakeholders and emissions sources in the area. Project-generated data will offer the community a shared language with regulators to articulate complaints and will allow members of the community to better-understand their experiences related to air quality.**

This project will publish real-time air monitoring data on websites (voc.createlab.org, environmentaldata.org, and map.purpleair.com), and educate residents in how to use these data resources to be informed about real-time and trend-based air monitoring data. We will utilize EPA Compendium Method TO-15 air sampling during high pollution events and compare the results to real-time monitoring data, and smell report analysis. Data summaries from these outputs will provide residents with more accurate, detailed data to associate with their lived experience.

To summarize, this project will:

1. Initiate an air quality monitoring program with community-based organization project partners, based on on-going and future collaboration, conversations, and resource sharing, including:
 - a. Share current scope of existing community-owned monitoring networks

- b. Learn about typical resident experiences associated with air pollution that could be markers of pollution event patterns (for later sampling)
 - c. Record interest community has in monitoring and later reporting
 - d. Determine potential locations to expand low-cost monitoring networks and to place TO-15 air samplers
2. Support systemized crowdsourcing of reports of pollution experiences to be able to correlate the human experience with monitoring data by recruiting more people to use the SmellPGH app.
3. Purchase and distribute PurpleAir PM2.5, Airviz tVOC monitors, and Sensit SPod TO-15 air samplers according to scopes outlined by partners.
4. Publicly share data summaries every six months with local residents, local government representatives, and regulatory stakeholders, such as ACHD and EPA Region 3. Events and reports will increase the public's knowledge about air monitoring through education about ambient air pollution levels and HAP exposures. Reports will include:
 - a. Analysis of typical odor descriptions and regional patterns in crowd-sourced odor report data
 - b. TO-15 sampling analysis
 - c. Air dispersion modeling from sampling times with the goal of determining potential sources of air pollution
 - d. Health impacts record by residents
 - e. Analysis of data from community-owned low-cost monitoring networks

B. Project Significance (10 points)

Likely due to past and present coke and steel production, for at least the past 30 years air quality in the project area has exceeded Pennsylvania's 24-hour average hydrogen sulfide (H₂S) ambient air quality standard of 0.005 parts per million (ppm) dozens of times per year. While such H₂S levels might be considered more of a nuisance than acute threat to human health, community members routinely have complained to regulatory agencies about the impacts of the odors and reported health issues beyond what mere "nuisance" levels of H₂S could explain. A growing concern is that air toxics might be accompanying or masked by the overpowering H₂S rotten-egg stench.

Research on the matter shows that air toxics in the project area present a well-above-average threat to public health. This includes analysis from EPA RSEI, EPA TRI, and local air quality regulatory agency studies. Existing data from low-cost, accessible technology like the SmellPgh app and Airviz tVOC monitors have supported community-based concerns that more than just H₂S is infiltrating the air in the project area.

To better-assess the potential threat to public health, the project applicants have begun to look more closely at a model developed by EPA Region 4, EPA Office of Research and Development (ORD), and the City of Louisville Metro Air Pollution Control District (LMAPCD). Their method of identifying and assessing air toxic concentrations in Louisville's Rubbertown District emerged from a set of conditions similar to those our target communities face. As this project unfolds, we will apply lessons learned from Rubbertown and replicate aspects of the work in our communities as appropriate and applicable.

Of greatest importance is TO-15 air sampling, which will provide communities and regulators with a detailed understanding of HAP levels the target communities are being exposed to. If as we predict, exposure follows high incidence of odor reports and high tVOC levels, then SmellPGH data and low-cost monitoring could - going forward - be an indicator of exposure to harmful air pollution. This project would add 92 monitors to existing monitoring networks in the project area. Increasing the density of air monitoring networks adds value by providing a greater understanding of air pollution pathways in order to track pollution to potential sources or see where ambient pollution levels are of greatest concern. These networks and the sampling validation will add valuable context for communities, emissions sources, regulators, and health professionals.

Section 2. Community Involvement (25 or 35 points)

A. Community Partnerships (15 points)

Group Against Smog & Pollution (GASP) was founded in 1969 and has been a diligent watchdog, educator, litigator, and policymaker on air quality issues in SWPA. Organized before the Clean Air Act or Environmental Protection Agency, GASP has a long history of working to meaningfully reduce air pollution in the region. Our expertise, credibility, and persistence has led to our deep connection to residents in SWPA and partner environmental organizations. GASP has been privileged to complete past meaningful projects with each organization named here and looks forward to continuing to organize with each group after this project is complete.

Clean Water Fund (CWF) has worked to address poor air quality in Allegheny County for over 20 years, helping to build community committees to address local air pollution sources, improving local air pollution policies and regulation, and managed local air monitoring programs including training residents to manage air sampling, video monitoring and other community based methods to improve community understanding of air contaminants, health impacts, and sources. CWF will be responsible for designing and facilitating community sessions to gather community input on the project and to provide direct reporting to the community on monitoring results. For the Mon Valley sessions, CWF will conduct outreach for the community sessions in coordination with the two Mon Valley community partners. CWF hired in 2020 a Black Mon Valley resident who will be able to focus outreach efforts on the environmental justice communities for this project.

CWF has a long history of work with many of the project partners. CWF and GASP have previously collaborated on efforts to retrofit public diesel fleets with diesel particulate filters including school buses for Pittsburgh Public Schools and waste haulers for the City of Pittsburgh. CWF has engaged at the community level in both the Neville Island area and the Mon Valley for over a decade and assisted residents in the initial formation of both ACCAN and VCAN.

Valley Clean Air Now (VCAN) is a community based organization of residents in the Mon Valley, particularly the Clairton area and surrounding community (including Glassport, Liberty, West Mifflin, and Duquesne), most of which is classified as an Environmental Justice community by the Pennsylvania DEP. Living next to Allegheny County's largest industrial polluters, the area around Clairton suffers from some of the worst air quality in the U.S. VCAN works to educate residents and engage in community efforts to protect residents' health. In 2020, VCAN led a coalition of local groups that provided portable air cleaners to 150 Clairton residents who had existing respiratory and cardiovascular disease, in order to reduce the impact of poor ambient air quality on their households.

For this project, VCAN will recruit 12 new monitoring locations in Clairton or nearby communities, based on community interest and local hotspot observations. VCAN will actively work to educate the community on monitoring findings, both by promoting the community sessions, and using its website and other communication tools. By providing community air monitors VCAN members will be able to better understand air pollution impacts on their communities and will receive training in order to ensure monitoring can continue after the project is concluded.

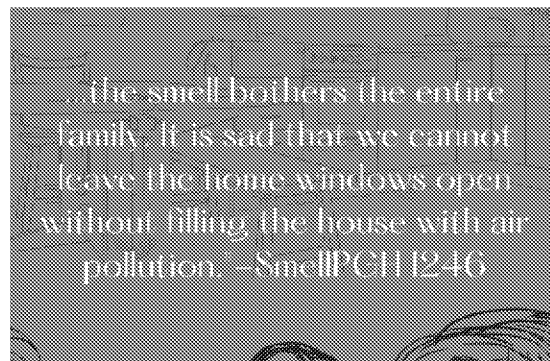
Allegheny Clean Air Now (ACCAN) was founded in 2014 to give a voice to the residents living downwind from the DTE Energy's Shenango Coke Plant on Neville Island. For decades, residents of Avalon, Bellevue, Ben Avon, Emsworth, and Brighton Heights, in particular, were directly impacted by the pollution from Shenango. Foul, poor quality air was a daily occurrence and it affected the health and well being of local residents. The Northgate School District, in the community, recorded the highest asthma rate in Pennsylvania. Nearby communities displayed increased rates of chronic diseases such as cancer. ACCAN worked with the ACHD and the EPA to get Shenango to comply with federal and county regulations, limit production on "bad air days", record all air quality complaints, and impose an effective fine schedule. They continue to use these grassroots tactics to support communities in their fight for better air quality and improved health outcomes. For this project, ACCAN will recruit 7 additional residents to host outdoor air monitors at strategic locations in the Neville Island airshed expanding our Airviz tVOC and PurpleAir PM2.5 monitoring networks. They will work to expand the use of SmellPGH in their airshed and use data from the air monitors, SmellPGH reports and odor reports from residents to help identify when air should be sampled for HAPs. Over the course of the project, ACCAN will have some of our volunteers trained in maintaining the air monitors, closely track the data from the monitors in our airshed, and participate in compiling data summaries. ACCAN will hold public meetings to disseminate information about the monitoring project and gather public input.

Protect Elizabeth Township (PET) is a grassroots community organization that is focused on advocating for protection of resident rights while striving to help build a better community. They have engaged in grassroots organizing around several major county permit hearings in Elizabeth Township, PA and throughout the Mon Valley. They are environmental advocates with extensive experience managing air quality monitoring networks. For this project, PET will identify 12 new monitoring locations, reorganize our current monitoring network to avoid unnecessary redundancies, and assist Valley Clean Air Now with their low-cost monitoring needs. PET representative, Fred Bickerton, will also serve as the Quality Assurance Manager for this project.

Birmingham/Uptown Group (BUG) is a collective of individuals and community organizations that represent residents living within close proximity to the Birmingham Bridge, which connects two sides of the Monongahela River (Uptown and an area formerly known as Birmingham) and hosts along its riverbanks, sources of pollution concern, including an asphalt production facility, concrete works, and steel rolling facility. Group meetings are facilitated by Christine Graziano, a resident of the East End, who is also a practicing and accredited professional in the environmental design and planning fields, and skilled in systems thinking and regenerative practice.

BUG will be responsible for ensuring 12 monitoring sites throughout the neighborhoods of Oakland, Uptown, Hill District, Southside Flats and Shadyside. They will also conduct air sampling in coordination with SmellPGH reports and low-cost monitoring data. BUG will regularly share input in response to the semi-annual data summaries with the intent to help co-design and inform each next step of the project. The sampling and monitoring proposed will allow us to more deeply investigate concerns of HAPs. We will request data from our health care providers and insurers in the area also to better understand any correlations between these project findings and patterns in health statistics within our neighborhoods.

Carnegie Mellon University CREATE Lab is a community-focused technology empowerment and partnership organization. Since 2014, CREATE Lab has collaborated on ways residents can combine voices to better document air pollution and to speak with amplified voices. CREATE Lab has worked closely with each of these partner organizations to support the development of their low-cost community-owned air monitoring networks, by creating publicly accessible websites where data can be accessed, like voc.createlab.org and environmentaldata.org. The CREATE Lab maintains reliable weekly engagement with each partner organization for co-designing air pollution documentation strategies, and for supporting community-led advocacy efforts.



For this project, CREATE Lab will maintain the SmellPGH application and website. They will engage stakeholders throughout the course of the project to support smell reporting data analysis on zip code and other scales. CREATE Lab will provide and maintain the Environmental Sensing Data Repository (ESDR) infrastructure service for aggregation of air monitor data, on which parts of this proposal depend. CREATE Lab will maintain public data access websites. CREATE Lab will participate in strategic planning and community engagement, including supporting the creation of materials for quarterly data reports. They will create tailored analyses and visualizations that can enhance reports, such as forward dispersion and back trajectory modeling.

The Breathe Project is a collaboration of over 50 organizations in Southwestern Pennsylvania working together to improve our region's poor air quality. Our collaborative network includes community organizations, public health experts, air quality scientists, monitoring technology experts, and environmental advocacy organizations. We use the best available science and technology to understand the quality of the air we breathe and provide opportunities for citizens to engage and act. Our organization commits to this project access to the Breathe Project's network of participants so that the project's deployment as well as the results of the monitoring data can be widely supported and disseminated regionally. The staff of the Breathe Project will collaborate with the committed organizations in this proposal to connect its efforts to the wider Breathe Project network's efforts to address ongoing environmental justice air quality and health issues in the Monongahela Valley through campaign support, earned media support, and in supporting responsible party accountability campaigns. The Breathe Project is also the host to a community network that convenes community conversations in the Uptown and Birmingham communities in the City of Pittsburgh, both on the banks of the Monongahela River in the Mon Valley.

B. Community Engagement (10 points)

Community engagement will be a critical part of the overall project. Each of the geographies in the project area region that will be collecting monitoring data has a community partner that is engaged with the project. Allegheny County Clean Air Now (ACCAN) is located in the Neville Island area. Birmingham/Uptown Group is in the Uptown/Oakland section of Pittsburgh. Valley Clean Air Now (VCAN) and Protect Elizabeth Township (PET) are located in the Monongahela Valley.

Goals of community engagement efforts will include:

- Learning from community members where poor air quality hotspots exist in order to determine monitoring/sampling locations
- Learning from community members what their goals are for learning about contaminants in the air they are breathing.
- Learning from community members what are the best methods for communicating the results of monitoring/sampling, taking into account community goals and technology access.
- Education of community members regarding monitoring results and analysis

Regular community meetings will be held throughout the project to ensure that communities hosting monitoring sites will be involved in all stages of the project. ACCAN and BUG will hold semi-annual sessions. Clean Water Fund (CWF) will coordinate

two community sessions in the Mon Valley each year (6 total for the project), working in coordination with Mon Valley community partners.

Initial community sessions will focus on gathering community input as outlined in the goals list above. These sessions will also be a forum for recruiting monitoring location hosts and discussing outreach plans for development of locating the new monitors to be deployed.

CWF will work to engage community participants after initial sessions through getting residents to start to utilize methods of reporting their observations of poor air quality either through the SmellPGH app, or through non-technologically based methods such as air pollution journals and establishing a hotline for residents. SmellPGH has been a strong resource for many Pittsburgh residents to report malodors and other air quality problems which can be of great utility in determining monitoring/sampling needs. However, increased utility in the Mon Valley is needed for this project, and CWF will especially focus on outreach in the environmental justice communities to establish broader usage.

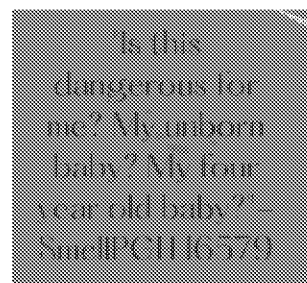
After initial sessions, there will be follow up by the various community partners regarding recruitment of monitor locations and deployment. Follow up community sessions will focus on reporting findings of monitoring and TO-15 air sampling to community members, and further discussion of best methods for communicating monitoring data to the community. Project partners will also present analysis of the monitoring and air sampling, both from examining potential health impacts and investigating potential sources.

The starting point for community engagement will be the community-based partners to the project as these groups are based on residents who have worked for years on air quality issues in their communities. However, CWF will in addition utilize other community engagement strategies, including outreach to local elected officials, other civic, health, and faith-based organizations, and organizing one on one outreach to Mon Valley residents through door to door, phone banking, and texting outreach.

C. Community-Based Organization Set-Aside (10 points) N/A

Section 3. Environmental Justice and Underserved Communities (10 Points)

Residents of Allegheny County have long suffered the burden(s) of air pollution; a visitor over 150 years ago described the heavy smoke and coal-fired industries as “looking over into hell with the lid taken off.” More recently, as the pandemic wore on and some regulatory agencies slowed or paused enforcement, Dr. Debra Bogen, Director of the ACHD remarked that the County would continue to enforce all air quality regulations, noting, **“Air quality in our region, particularly in the Mon Valley, continues to be one of our most pressing public health challenges.”** She added, “Even during this pandemic, with our attention focused on response and actions to deal with COVID-19 in our community, we are not losing sight of that need.” All four community-based organizations in this project work in underserved communities with environmental justice concerns but the specific hardships these communities face change slightly with geography.



Two organizations - PET and VCAN - serve communities in the Mon Valley well South of the City of Pittsburgh. This area contains the last operating steel- and coke-making facilities in Western Pennsylvania. These communities' distance and isolation from the urban center of the County - Pittsburgh - mean it still bears more of the scars of the region's industrial past. Residents throughout Allegheny County have been living with air pollution for many decades but the continued presence of the steel industry adds a wrinkle: “Pittsburgh-area children living near steel mills, power plants and other large sources of pollution had “nearly triple” the national rate of childhood asthma, according to a new peer-reviewed study” conducted by researchers at the University of Pittsburgh.

Sadly, the more northern community-based organizations partnering in this project - BUG and ACCAN - do not necessarily face less pollution; just different sources. In fact, the study we just cited also remarked, **“The authors tried to find a control group of other students in Allegheny County that fit the same demographics of the children living near high-pollution sources, but they could not, because areas with similarly high populations of minority and low-income residents were all located close to air pollution sources.”** Like the Mon Valley groups, BUG and ACCAN are made up of residents who live along the fence lines of industrial pollution. ACCAN works towards improving air quality on and around Neville Island, a heavily industrialized area West of Pittsburgh. What the area lacks in steel production it makes up for in chemical production and storage. Densely populated neighborhoods sit on Neville Island itself and in surrounding communities along the river valley.

Neighborhoods in the City of Pittsburgh where BUG works include Uptown, the Hill District, Oakland, South Side Flats and Shadyside. The Uptown neighborhood's demographic majority is Black (32.2%) and is a historically underserved and redlined community with a median household income of \$23,603. Industrial and mobile sources of pollution physically define the neighborhood boundaries.

What unites these four communities for the purpose of this project is that poor air quality disproportionately burdens their residents. Using EJScreen and EJ Standard Reports, there are neighborhoods in each environmental group's area that score very high in air related EJ Indexes, such as PM2.5 and diesel particulate matter percentile. Additionally, each group scores high in Air Toxics Respiratory Illness and Air Toxics Cancer Risk. Each group's area has communities that score in the EJ Index for 2017 Air Toxics Cancer Risk above 75 on either or both the State or USA Percentile comparison.

The proposed project itself cannot make up for or undo these impacts. It will however empower these communities with unassailable data assessing the particular risks these communities face. By holding regular community listening and reporting sessions, the project can inform but also itself be better informed about where to monitor, and how to present data to the community in a way that meets their needs. It is critical that the collection of new air monitoring data be shared in a transparent way with the community members who are most at risk from the adverse health impacts already being felt. This is especially true in the environmental justice communities such as Clairton, Glassport, and Duquesne, which make up a significant portion of the Mon Valley, Stowe Township in the Neville Island area, Sutersville near Elizabeth Township, as well as Uptown and the Hill District in the city of Pittsburgh.

Ultimately the monitoring and sampling taking place over the life of this project will lead to discussions between these community-based organizations and government stakeholders. The goal of the project is to improve the communities' air quality, increase interest and community participation in ongoing air monitoring and grow resident participation with the government and other authorities working on air quality improvement in the project area.

Additionally, each partner group is deeply involved and committed to the well-being of the communities associated with this project because much of their leadership, staff, membership, and volunteers are from these communities. This project approach seeks to build on existing relationships to ensure that core community leaders and residents are a meaningful part of the project by equipping our neighbors with the information and skills they need to address air quality concerns.

Section 4. Environmental Results - Outcomes, Outputs and Performance Measures (20 Points)

A. Expected Project Outputs and Outcomes (10 points)

The main outputs of this project will be HAP speciation from 180 TO-15 air samples; 92 low-cost monitors installed within networks in the project scope; increasing awareness and access to air quality environmental data platforms. The outcomes include expanding existing and developing new low-cost community-owned monitoring networks, increasing understanding of air quality data and air pollution exposures, and connecting exposures to health outcomes in order to inform air quality standard recommendations. See Table 1 for a summary of expected outputs and outcomes. By providing the marginalized communities of the Mon Valley, Neville Island, and Pittsburgh with the important air quality information that will result from this project, they will be able to better address the air pollution and other environmental hazards that have overburdened their communities for decades and will help fulfill the promise of the EPA Strategic Plan Objective 4.1 to "Improve Air Quality and Reduce Localized Pollution and Health Impacts."

Table 1: Summary of Expected Outputs and Outcomes

Activities	Outputs	Outcomes
<ul style="list-style-type: none"> Conduct outreach within existing monitoring networks and project communities to identify and locate new monitoring sites. Conduct two community conversation sessions per year within project communities to share ongoing results and gather feedback Collect and analyze monitoring data, SmellPgh app user reports, and TO-15 air sample analysis to visualize air pollution. Provide written reports every six months to ACHD and EPA Region 3 documenting ongoing project results. 	<ul style="list-style-type: none"> \$499,781 expended on project activities 180 TO-15 air samples 92 new monitors installed Increased usership of SmellPGH, voc.createlab.org, and environmentaldata.org Speciated ambient pollution exposure in 180 TO-15 reports 	<ul style="list-style-type: none"> Expand existing and create new low-cost monitor community networks. (short-term) Increased understanding of air quality data. (short-term) Shared data access points between public and regulators. (medium-term) Sustained engagement with residents living in impacted areas, community partners, and regulators. (medium term) Increase understanding of HAP exposure in river valley topography in project area. (long-term) Connect exposures to health outcomes in order to inform air quality standard recommendations. (long-term)

B. Performance Measures and Plan (5 points)

GASP's performance measures and plan are in accordance with the EPA policy requirements specified in the National Term and Condition for Subawards. Each of the Subrecipients has been required to submit a detailed scope of work describing their role, responsibilities, and deliverables. The Project Manager will be responsible for creating a project timeline with milestones based on the Outputs column in Table 1 above. The timeline will include planned expenditures. Each of the Subrecipients should agree to the overall project timeline and milestones before project implementation begins. The Project Manager will meet with the Key Personnel to address any discrepancies between the scope of work and performance. Suggestions for improvement as the project progresses will be incorporated into the overall project timeline and milestones. GASP Executive Director will approve all expenditures and purchases on a quarterly basis, based on performance as described in the project timeline.

C. Timeline and Milestones (5 points)

To document progress during the air monitoring project, Group Against Smog & Pollution will provide quarterly reports to EPA on project progress to date, including: Planned project activities and technical progress in most recently completed quarter, and planned activities for next quarter. Summary of expenditures on project activities in most recently completed quarter, and planned expenditures for next quarter. Technical problems or issues and their resolution.

Group Against Smog & Pollution will also provide a final report to EPA within 120 calendar days of completion of the project. This report will include a summary of project activities and expenditures and a discussion of problems, successes, and lessons learned from the project, and a detailed projection of emissions benefits that will be achieved by the project. In addition, the final report shall discuss the problems, successes, and lessons learned from the project or activity that could help overcome structural, organizational or technical obstacles to implementing a similar project elsewhere.

Ambient Air Monitoring and Air Sampling Project to Estimate Hazardous Air Pollutant (HAP) Emissions, Leveraging
Crowd-Sourced Odor Reporting and Community-Owned Monitoring Networks

Date	Activity
11/1/2022 - 12/1/2022	Hold first community conversation about air pollution and monitoring to introduce monitoring project and find new monitor hosts
12/1/2022 - 2/1/2023	Deploy new monitors and set up SPod TO-15 samplers
2/1/2023	1st Quarterly Report sent to USEPA
2/1/2023-6/1/2023	Sample air using TO-15 summa method based on low-cost monitor readings and smell events
5/1/2023	2nd Quarterly Report sent to USEPA
6/1/2023	Release 1st Semi-annual data analysis report to government stakeholders and public. Hold 2nd community conversation
8/1/2023	3rd Quarterly Report sent to USEPA
11/1/2023	4th Quarterly Report sent to USEPA
12/1/2023	Release 2nd Semi-annual data analysis report to government stakeholders and public. Hold 3rd community conversation
2/1/2024	5th Quarterly Report sent to USEPA
5/1/2024	6th Quarterly Report sent to USEPA
6/1/2024	Release 3rd Semi-annual data analysis report to government stakeholders and public. Hold 4th community conversation
8/1/2024	7th Quarterly Report sent to USEPA
11/1/2024	8th Quarterly Report sent to USEPA
12/1/2024	Release 4th Semi-annual data analysis report to government stakeholders and public. Hold 5th community conversation
2/1/2025	9th Quarterly Report sent to USEPA
5/1/2025	10th Quarterly Report sent to USEPA
6/1/2025	Release 5th Semi-annual data analysis report to government stakeholders and public. Hold 6th community conversation
7/31/2025	Final Project Date
8/1/2025	11th Quarterly Report Sent to USEPA
11/1/2025	Final Report Submitted to USEPA

Section 5. Quality Assurance Statement (5 points)

GASP understands the need to carry out work under this potential agreement within a quality assurance system commensurate with the degree of confidence needed for the environmentally related data operations, and intends to carry out such quality assurance in accordance with the plan described in the Quality Assurance attachment to this application.

Section 6. Programmatic Capability and Past Performance (15 points)**A. Past Performance (5 possible points)**

Year	Funder	Award Amount	Project Description
April 2019	ACHD - Clean Air Fund	\$30,000	Developing, distributing, and facilitating air quality educational kits for middle and high school students in Environmental Justice Areas in Allegheny County. Performance measures included and tracked are number of kits created, number of schools where kits were distributed, and number of students educated. This agreement was successfully managed and completed.
July 2019	Pennsylvania Department of Environmental Protection	\$17,497	Developing, distributing, and facilitating air quality educational kits for middle and high school students in Southwest PA. Performance measures included and tracked are number of kits created, number of schools where kits were distributed, and number of students educated. This agreement was successfully managed and completed.
August 2020	Pittsburgh Foundation	\$40,000	Funding awarded for operator air permit inspection in Allegheny County, reviewing and commenting on coke oven regulations, and updating and educating the public on permit/regulation status. Performance measures included the number of permits reviewed and comments issued, and number of residents educated and updated. This agreement was successfully managed and completed.
December 2020	Laurel Foundation	\$20,000	Funding awarded for operator air permit inspection in Southwest PA, local air quality policy development, and educating youth and adults about air quality and health exposures. Performance measures included numbers of permits inspected and comments issued, number of relationships developed with local policy-makers, and number of youth and adults educated. This agreement was successfully managed and completed.
January 2021	The Heinz Endowments	\$320,000 (two-year award)	Funding awarded for operator air permit inspection in Southwest PA, local air quality policy development, and educating youth and adults about air quality and health exposures. Performance measures included numbers of permits inspected and comments issued, number of relationships developed with local policy-makers, and number of youth and adults educated. This agreement is successfully being managed.

B. Reporting Requirements (5 possible points)

In each case, Group Against Smog & Pollution consistently met its quarterly and final reporting requirements. The final reports in each case documented achievements of outputs and outcomes. Group Against Smog & Pollution staff successfully managed these projects through a combination of direct oversight and subcontracting. Group Against Smog & Pollution has successfully completed projects under assistance agreements (in the form of grants) from hundreds of other non-federal sources over its 53 year history. Of the grants listed above, each of the funders renewed their assistance agreements for these projects and other projects—a testament to Group Against Smog & Pollution’s efficacy in carrying out projects as planned through careful monitoring and project management. In each case, Group Against Smog & Pollution consistently met its interim and final reporting requirements in a timely manner and according to the requirements of each funder. Most of the assistance agreements have required performance measurements, outcomes and outputs, financial reports, and a narrative portion describing achievements and lessons learned. Group Against Smog & Pollution successfully managed these projects through a combination of direct oversight and forming partnerships with others to expand areas of expertise not found within the organization, making the most efficient and cost-effective performance results possible.

C. Staff Expertise (5 possible points)

Group Against Smog & Pollution has been in operation for more than 53 years and in that time has successfully managed numerous grants and cooperative agreements. **Patrick Campbell, Executive Director**, will be the Project Manager for this project (See attached resume).

Suzanne Seppi, GASP Project Manager, has a MA in Public Management from Carnegie Mellon University and a bachelor of science degree from Pennsylvania State University in biology education. Additionally, Seppi has served as the first Executive Director of GASP before transitioning into her current role.

Ned Mulcahy, GASP Staff Attorney, has a Juris Doctor and a Master of Public Health from the University of Pittsburgh. He earned a BA in Political Science with a minor in Chemistry from Allegheny College.

Partner Organizations

Ana Hoffman, Director of Air Quality Engagement at Carnegie Mellon University CREATE Lab, earned a BA in Geography and is a certified GIS analyst from DePaul University. She is an intuitive Geographer with extensive experience for the last 8 years engaging with various stakeholders using data-framed storytelling to support environmental advocacy.

Myron Arnowitt, State Director at Clean Water Fund, earned a Master of Public Health from University of Pittsburgh, a BA in Religion from Swarthmore College, and is a Certified Visual Emissions Inspector.

Germaine Gooden-Patterson, Community Health Worker at Women for a Healthy Environment and Organizer at Valley Clean Air Now, earned an AS in Computer Science from Community College of Allegheny County, is a Pennsylvania Certified Community Health Worker, and is a Certified Health Coach from Institute for Integrative Nutrition.

Christine Graziano, President of Plant Five for Life and a Breathe Project supported community facilitator, is a Certified Planner with the American Institute of Planners, and earned a Masters of Landscape Architecture from University of Pennsylvania, is completing her Masters of Natural Resource Management at University of Pennsylvania this year and also earned a B.S. in Environmental Policy at SUNY College of Environmental Sciences & Forestry in association with Syracuse University.

Karen Bordas Gryzwinski, Organizer at Allegheny Clean Air Now, earned a Master of Science in Mechanical Engineering from the University of Pittsburgh, a BS in Mechanical Engineering from the University of Pittsburgh, and a BA in Fine Arts from Indiana University of Pennsylvania.

Frederick Bickerton, Organizer at Protect Elizabeth Township, earned a BS in Mechanical Engineering from The Pennsylvania State University and is a member of both Electric Power Research Institute (EPRI), Waste Isolation Containment Committee and Electric Power Research Institute (EPRI), FGD Maintenance Guidelines Committee.

Section 7. Budget (20 points)

A. Budget Detail (5 points)

Group Against Smog & Pollution is requesting \$499,781.00 in grant funding from EPA, which will be used to purchase equipment and supplies, issue subaward costs, and to cover Group Against Smog & Pollution's project management costs.

PERSONNEL – Group Against Smog & Pollution	Federal	Cost Share
Salaries and Wages		
Executive Director 1 @ \$23.08/hr, 3.5 hr/wk, 156 weeks	\$12,837.00	
Project Manager 1 @ \$20/hr, 3.3 hr/wk, 156 weeks	\$10,440.00	
Staff Attorney 1 @ \$21.48/hr, 3 hr/wk, 156 weeks	\$10,355.00	
Community Monitoring Coordinator 1 @ \$20/hr, 20 hr/wk, 156 weeks	\$62,400.00	
TOTAL PERSONNEL	\$96,032.00	
FRINGE BENEFITS	Federal	Cost Share
0% of Direct Personnel Costs	\$0	
TOTAL FRINGE BENEFITS	\$0	
TRAVEL & OTHER – NESCAUM	Federal	Cost Share
Travel (2 trips) OR Mileage for Staff: 50 mi/wk @ \$.17/mi x 208 wks	\$0	
TOTAL TRAVEL	\$0	
EQUIPMENT	Federal	Cost Share
Sensit SPod Monitors 5 @ \$21,298/unit/3 years	\$106,490.00	
TOTAL EQUIPMENT	\$106,490.00	
SUPPLIES	Federal	Cost Share
Monitor Mounting Hardware	\$2,000.00	
PurpleAir Monitors 46 @ \$325/unit	\$14,950.00	
AirViz Monitors 46 @ \$400/unit	\$18,400.00	
Summa Canisters (rental) 180 @ \$275/unit	\$49,500.0	
TOTAL SUPPLIES	\$84,850.00	
CONTRACTUAL	Federal	Cost Share
Support Services Contract	\$0	
TOTAL CONTRACTUAL	\$0	
OTHER	Federal	Cost Share
Subaward Costs	\$212,409.00	
TOTAL OTHER	\$212,409.00	
INDIRECT	Federal	Cost Share
Federal Indirect Cost Rate x Personnel = Indirect Costs (Federal Negotiated Indirect Cost Rate = 20%)	\$0	
TOTAL INDIRECT	\$0	
TOTALS	Federal	Cost Share
TOTAL FUNDING	\$499,781.00	
TOTAL PROJECT COST		\$499,781.00

Annual Salaries: Executive Director – \$48,000; Staff Attorney – \$44,669; Project Manager – \$20/hour; Community Monitoring Coordinator – \$20/hour

B. Reasonableness of Costs (10 points)

Personnel

GASP personnel that have been named on this proposal will carry out key functions within the scope of this project. The Executive Director serves in the Project Manager role in addition to maintaining careful financial and project oversight. GASP's Project Manager will provide support for the Community Monitoring Coordinator as well as identifying monitoring locations in the Braddock community. GASP's Staff Attorney will provide technical data support for the project as well as assistance in preparing the semi-annual data reports to the public. Finally, the Community Monitoring Coordinator will directly work with each organizational partner's point of contact to site monitors, provide technical assistance, interact with monitoring hosts, and assist in preparing the semi-annual data reports for the public.

Equipment

The Sensit SPod system further augments this approach by ensuring samples are taken when pollutants of concern are present while providing additional weather data that allows for more accurate analysis of potential sources.

Supplies

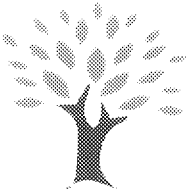
The low-cost Airviz tVOC and PurpleAir PM2.5 monitors purchased for this project provide valuable information about air pollution trends. They are useful indicators to inform residents participating when it is time to use TO-15 sampling methods to speciate VOCs in the air. The real-time availability of this data makes them particularly useful to residents participating in the project, so that they can make decisions to mitigate pollution exposure, such as turning on air purification systems, deciding not to exercise outdoors if possible, or for asthmatic people to remember to take an inhaler with them when they leave for the day. These monitors will also be used as supplemental information for periodic data summaries. TO-15 analysis of SUMMA canister samples allows for the collection of highly reliable data relatively easily and with a variety of time frames ranging from grab samples to 24-hour samples. This combination of flexibility, ease of collection, and quality allows project partners to better analyze and describe to the community the health effects associated with air toxics found in the ambient air.

Subawards

In this proposal, subawards are made to partner organizations to complete essential project functions: new monitoring siting, relocating existing monitors within current networks, monitor maintenance, engagement with resident monitoring hosts and interacting with the public, data analysis, drafting Semi-Annual Data Analysis Reports, and facilitating Community Conversations.

C. Expenditure of Awarded Funds (5 points)

Group Against Smog & Pollution will expend awarded grant funds in a timely and efficient manner in accordance with our grant administration procedures. Group Against Smog & Pollution has written procedures relating to the planning and budgeting process; authorizing spending; timekeeping and labor documentation. In addition, Group Against Smog & Pollution completes an annual review and update of policies and procedures documents. Group Against Smog & Pollution's financial tracking system shows spending within and across each fiscal year, and we perform regular reconciliations of financial accounts. We are able to relate our financial data to performance accomplishments to ensure accountability to various funding sources. Group Against Smog & Pollution demonstrates effective control and accountability for all cash, property and other assets through yearly independent audits. Group Against Smog & Pollution's internal controls are in compliance with the U.S. Constitution, Federal statutes, regulations, and the terms and conditions of the Federal awards, as well as the guidance in "Standards for Internal Control in the Federal Government" issued by the Comptroller General of the United States. Group Against Smog & Pollution's preventative controls to limit risk of asset loss include segregation of duties among the Executive Director, Member Services Manager, Treasurer, and Board of Directors. Our Treasurer verifies budgets for each grant or assistance agreement, and tracks spending through monthly reports, submitted with receipts and approved by the Executive Director. The Board reviews and approves each individual budget by line item, along with Group Against Smog & Pollution's total expenditures and revenue on a quarterly basis. If awarded, Group Against Smog & Pollution will monitor all expenses related to the EPA air monitoring grant on a monthly basis and comply with all EPA reporting requirements.



Protect Elizabeth Township

www.protectelizabethtownship.org

Group Against Smog & Pollution
1133 South Braddock Avenue
Suite 1A
Pittsburgh, PA 15218

February 26, 2022

Subject: Ambient Air Monitoring and Air Sampling Project to Estimate Hazardous Air Pollutant (HAP) Emissions, Leveraging Crowd - Sourced Odor Reporting and Community - Owned Monitoring Networks

Dear Group Against Smog & Pollution:

Protect Elizabeth Township (PET) EIN 81-1460923

Protect Elizabeth Township (PET) is a 501(c)3 non-profit citizens' organization working to ensure the safety, security, and quality of life for residents of Elizabeth Township, Allegheny County, PA, and surrounding communities. We are a grass roots volunteer community organization led by socially and environmentally conscious members that reside within the promoted areas. Protect Elizabeth Township meets regularly to discuss local current events, help educate and empower area residents to become more involved in current local events, public meetings, and hearings to help promote a more viable community for current and future generations.

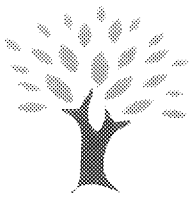
Our Goals

Educate, Empower, and Engage

Educate residents and local lawmakers with factual and valuable information so they may make sound decisions and better protect themselves, their constituents, and future generations.

Empower through education, we help and encourage residents to get involved in the local government process.

Engage our lawmakers, we engage directly at local meetings and hearings to present factual information and ensure citizen rights are protected.



Protect Elizabeth Township

www.protectelizabethtownship.org

Commitment to the Collaboration

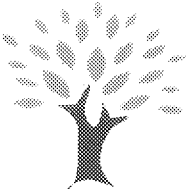
Protect Elizabeth Township (PET) is committed to help plan and develop a network of low-cost air monitoring in the region of southwestern Pennsylvania, concentrating on the Pittsburgh and Mon Valley areas, much of which is identified as Environmental Justice or underserved communities. Establishing an educational agenda to share collected data with area residents as well local government agencies.

Several years ago, PET had discovered the need for greater air monitoring locally and regionally due to overall lack of quality regional monitoring leading to inconsistent or missing information used for government permitting purposes. Knowing that our regional air quality is reported in the top worst in the nation, also knowing many of the local communities in our region are classified as Environmental Justice or underserved communities, we wanted to do and learn more and with that knowledge educate the public to what we have learned.

With the financial contributions from the Heinz Foundation, Community Foundation for the Greater Alleghenies and Food and Water Watch, and the collaboration of Create Lab to collect data, PET has installed and maintains approximately fifteen air quality monitoring setups in our local area. These set ups consist of one Purple Air Monitor to measure particulate matter and one AirViz monitor designed and built by Create Lab which are designed to measure VOC levels in the air. We meet bi-weekly to review data and discuss trends that we detect with both the public owned low-cost monitors and those operated by government agencies. This information is tracked and available for live review to the public on both the Purple Air and Plume Pittsburgh websites.

This work has recently gained the attention of the Allegheny County Health Department which is responsible for the air quality in our region. They have placed their own monitors adjacent to some of our sets assuming to prove our readings.

COVID 19 has caused PET to change our methods of engaging public for education and fundraise in support of our work, we have been forced to use different social media platforms which has removed the personal interaction. Many of the Mon Valley regional neighborhoods are classified or meet the criteria as Environmental Justice areas or underserved communities, many residents in these areas have limited access to much of the social media technology that we use.



Protect Elizabeth Township

www.protectelizabethtownship.org

Through this collaboration of partners, PET has every intention to continue existing monitoring and further increase this network of monitoring in our region to help better understand what is in the air we breathe and identify the source of contamination with the intent to mitigate or eliminate the contamination. Through this collaboration, PET plans to help establish a public education and outreach program to help understand the concerns of residents and complaints in their neighborhoods, educate them to what we are learning through these monitors and how to access this publicly available information.

PET regularly engages local government public meetings and hearings, we have submitted written and oral testimony to government agency requests, local state, and the federal EPA regarding air quality over the past few years with the anticipation of a better understanding of resident concerns and responsibilities by all parties involved. Information gained through this collaboration will be offered and shared with all that would like to learn from it.

Goals that we would like to see out of this program are.

- 1) Expand existing network of low-cost monitors to better understand results observed on our existing network.
- 2) Expand existing network to include areas that are not adequately being monitored by the current network.
- 3) Purchase of equipment capable of determining specific airborne pollutants similar to Suma canisters that can be deployed when pollutants and bad air quality is experienced to help determine both specific pollutants and source of such.
- 4) Establish data reporting for public education and sharing with government agencies
- 5) Collaborate in public education at the community level as related to knowledge of pollutants
- 6) Examine the gap between existing data outlets by government agencies and public knowledge

Sincerely,

J. Scott Taylor

President

Protect Elizabeth Township

Environmental Protection Agency (EPA)
Enhanced Air Quality Monitoring for Communities
FY 2022 Request for Proposals (RFP) EPA-OAR-OAQPS-22-0

Project Title: Ambient Air Monitoring and Air Sampling Project to Estimate Hazardous Air Pollutant (HAP) Emissions, Leveraging Crowd-Sourced Odor Reporting and Community-Owned Monitoring Networks

Quality Assurance Plan

GASP has named Fred Bickerton as Quality Assurance Manager for this project. He is responsible for quality assurance and quality control for this project. He has maintained an air monitoring network of 20 PurpleAirs and 14 Airviz tVOC monitors for the past 3 years. He is a graduate from Pennsylvania State University in mechanical engineering and has experience managing air quality monitoring programs for Duquesne Light for 10 years.

Fred has engaged with the Allegheny County Health Department's air monitoring program and advised them on Method 325A sampling locations, colocating several passive sampling sites with locations in his community-owned monitoring network. He is familiar with the EPA Monitoring Toolbox. He has experience following the Standard Operating Procedures for the supplies and equipment below, except for the Sensit SPod, which he intends to consult with Carnegie Mellon University CREATE Lab for Quality Assurance with this device.

For installation, operation, and interpretation of data output from monitoring equipment items in this project, Fred will consult the EPA Monitoring Toolbox to follow EPA guidelines to the best of his ability. Fred will also ensure Standard Operating Procedures for each piece of equipment purchased are being followed.

Below are Quality Assurance statements for the data outputs from each air monitoring supply and equipment item.

The **Airviz Combo tVOC monitors** use a Sensirion SGP30 sensor to produce the tVOC data output. The SGP30 is a digital multi-pixel gas sensor designed for easy integration into air purifiers, demand-controlled ventilation, and IoT applications. Sensirion's CMOSens® technology offers a complete sensor system on a single chip featuring a digital I2C interface, a temperature controlled micro hotplate, and two preprocessed indoor air quality signals. As the first metal-oxide gas sensor featuring multiple sensing elements on one chip, the SGP30 provides more detailed information about the air quality. The sensing element features an unmatched robustness against contaminating gases present in real-world applications enabling a unique long-term stability and low drift. Air quality signals TVOC and CO2eq are calculated from Ethanol and H2 measurements using internal conversion and baseline compensation algorithms. SGP30 uses a dynamic baseline compensation algorithm and on-chip calibration parameters to provide two complementary air quality signals. Based on the sensor signals a total VOC signal (TVOC) and a CO2 equivalent signal (CO2eq) are calculated. Airviz Inc has written commands in accordance with Sensirion's recommendations to send an "sgp30_iaq_init" command which starts the air quality measurement. After the "sgp30_iaq_init" command, a "sgp30_measure_iaq" command is sent in regular intervals of 1s to ensure proper operation of the dynamic baseline compensation algorithm.

Reference, Datasheet SGP30 Sensirion Gas Platform:

<https://drive.google.com/drive/folders/1MnLQhUM1nVsk4CoyklnNapSmLV15saU>

The **Sensit SPod auto summa** will collect samples once tVOC readings exceed a certain threshold. This threshold will be determined based on measurements at the location of deployment, such that it is triggered during spikes in VOC levels relative to the mean concentrations in that area. The following steps will be used for SPod data analysis:

- SPod data visual inspection and thresholding to protect against “off scale” conditions where events are missed due to having the threshold set too high.
- SPod data visual inspection to investigate rapid relative humidity swings to ensure any measured events are not due to rapid climate changes which can affect the PID sensors.
- SPod data visual inspection to identify anomalous data drop-out conditions.
- Use of concentration wind rose plots to understand source direction.
- Review of 5-minute averaged PID data summary files for each SPod performed daily.
- Review of all daily data (one full 24-hour period from 00:00 to 24:00) including met sensors from each SPod, performed at least once per week.

Summa canister samples allow for the collection of highly reliable data relatively easily and with a variety of time frames ranging from grab samples to 24-hour samples. This combination of flexibility, ease of collection, and quality allows project partners to better analyze air toxics found in the ambient air. The Sensit SPod system further augments this approach by ensuring samples are taken when pollutants of concern are present while providing additional weather data that allows for more accurate analysis of potential sources.

Purple Air PM2.5 monitors manufactured by PurpleAir Inc (Draper, UT) use PMS5003 and PMS1003 laser particle counters to measure concentrations of PM2.5, and ESP8266 chips to sync real-time data over WiFi.. Studies have demonstrated validity of raw Purple Air measurements in identifying relative changes in PM2.5 magnitude, and calibrated Purple Air measurements show high correlations with reference-grade monitors. Purple Air sensors were chosen for their low cost, ease of real-time data upload to a pre-established global network, and relative accuracy.

Myron Arnowitt

Clean Water Action
100 Fifth Ave., #1108
Pittsburgh, PA 15222
412-765-3053, ext. 403
marnowitt@cleanwater.org

Education:

Swarthmore College ♦ B.A. in Religion

Graduate School of Public Health, University of Pittsburgh ♦ M.P.H. (candidate)

Eastern Technical Associates ♦ Certified Visible Emissions Evaluator

Work Experience:

1995 - present Clean Water Action / Clean Water Fund ♦ Pittsburgh, PA
Pennsylvania Director (2007 – present), Western PA Director (1995 – 2007)

State Director for membership based, national environmental advocacy organization. Coordinates campaigns for better laws and regulations to protect the public health and environment. Major experience includes:

- ♦ Produced public education materials and made public presentations concerning environmental issues including drinking water protection, air quality, and toxic chemical exposure.
- ♦ Extensive knowledge of Pennsylvania and local environmental regulations. Regularly assists Pennsylvania residents with problems including contaminated drinking water, poor air quality, and pesticide exposure.
- ♦ Served on advisory committees for both Pennsylvania Department of Environmental Protection and the Allegheny County Health Department.
- ♦ Coordinated campaigns to improve air quality in southwest PA including enacting new air pollution regulations in Allegheny County to improve environmental compliance, and training community residents in taking air pollution samples.
- ♦ Assisted Pittsburgh School District in establishing a least toxic pest control policy, one of the best in the nation.
- ♦ Responsible for state organization budget, including raising over \$500,000 annually.
- ♦ Supervises and trains 7-9 campaign staff, and provides support to three canvass operations.

1994 – 1995 and American Friends Service Committee ♦ Philadelphia, PA
1989 – 1991 Program Assistant

Supported programs both internationally and domestically for meeting human needs and non-violent conflict resolution. Worked in both the Middle East and Latin America programs. Produced educational materials and organized collection of donated school supplies and medical aid.

Myron Arnowitt
page 2

1991 – 1993 Kensington Joint Action Council ♦ Philadelphia, PA
Fundraiser / Grantwriter

Responsible for fundraising activities for this low-income multi-racial neighborhood organization. Tasks included researching funding sources, proposal writing and reporting.

1987 – 1988 Delaware County Jobs With Peace Campaign ♦ Chester, PA
Community Organizer

Community outreach and organizing of low-income residents around issues of job training, affordable housing, and discrimination against public assistance recipients.

Papers:

“Cancer Incidence in the Neville Island Area, 1990 – 1994”. Authors: Evelyn Talbott, Dr.PH, Norris Davis, MPH, and Kathleen McHugh, all of the Graduate School of Public Health, University of Pittsburgh, and Myron Arnowitt, Clean Water Action (1998, *unpublished*).

“Fracking: A Roundtable”. Authors: Myron Arnowitt, Ronald E. Bishop, David J. Lampe, Brian W. Okey, Tom Wilber. Journal of Appalachian Studies, Spring/Fall 2012, Vol. 18, 1 & 2.

Presentations:

Invited speaker at conferences held by the Pennsylvania Learning Disabilities Association, Pennsylvania Parent Teacher Association, the Air and Waste Management Association, the American School Health Association, the Learning and Developmental Disabilities Initiative, and the Collaborative on Health and the Environment in Pennsylvania. Invited to provide testimony to the Pennsylvania Senate Environmental Resources and Energy Committee and the Pennsylvania House Finance Committee. Regular speaker at classes of the University of Pittsburgh’s Graduate School of Public Health.

Volunteer Positions:

1995 – 2003	Member, Ashland/Neville/Sunoco Chemical Community Advisory Panel
1996 – 2014	Board Vice-President, East End Food Co-op Federal Credit Union
2002 – 2005	Member, Citizens and Institutions Advisory Panel, Three Rivers Wet Weather Demonstration Project
2003 – 2009	Member of both Regulation Subcommittee and Air Toxics Subcommittee, of the Allegheny County Health Department Air Pollution Control Advisory Committee
2005 – 2006	Member, Pennsylvania DEP Mercury Rule Workgroup
2009 – 2010	Member, Pennsylvania DEP Task Force on Chapter 95 Wastewater Treatment Requirements
2010 – 2012	Member, Allegheny County Health Department Committee on Regulation of Air Toxics
2010 – present	Member, Pennsylvania DEP Water Resources Advisory Committee

Frederick J. Bickerton, Jr.

Education

B. S. Mechanical Engineering, 1970, The Pennsylvania State University

Affiliations

Electric Power Research Institute (EPRI), Waste Isolation Containment committee, Member

Electric Power Research Institute (EPRI), FGD Maintenance Guidelines committee, Member

Previous Employment

Senior Project Engineer, GAI Consultants, Inc. 2004-2013

Director of Synfuel Facilities, DQE Energy Services (DQE Company) 2000-2004

Manager of Plant Services, Duquesne Energy, Inc. (DQE Company) 1999-2000

Director of Waste Management, Duquesne Light Company (DQE Company) 1987-1999

Senior Engineer/Engineering and Safety Coordinator, Phillips Power Station, Duquesne Light Company (DQE Company) 1979-1987

Mechanical Maintenance Engineer, Phillips Power Station, Duquesne Light Company (DQE Company) 1973-79

Engineer, Power Stations Department, Duquesne Light Company (DQE Company) 1970-1973

Professional Experience

Mr. Bickerton gained the professional experience summarized below through his 34 years of employment with DQE Companies.

- Directed all aspects of a \$23M/year electric utility based synthetic fuel production operation.
- Provided consulting services for testing and provided an "Opinion" that established the production capacity of six synthetic fuel facilities in excess of 14 million tons per year.
- Received Patent for "Coal-Based Pelletized Fuel Composition and Method of Manufacturing Same".
- Provided expertise in site selection and secured air quality and NPDES permits for synthetic fuel facilities in Pennsylvania, Ohio, Kentucky, Virginia, North Carolina, and South Carolina.
- Developed creative permitting strategy to reduce exposure of newly enacted Pennsylvania Residual Waste Management Regulations by \$91M.
- Directed a \$10M/year residual waste processing and disposal operation. Maximized opportunities for beneficial use of coal combustion products with an emphasis on highway applications and brownfield remediation. Recognized by the Electric Power Research Institute (EPRI) for High Volume Ash Utilization in Highway Applications.
- Directed the successful operation of the worlds first full-scale Utility Flue Gas Desulfurization system including FGD Product stabilization and disposal.

Mr. Bickerton gained the professional experience summarized below through his 9 years of employment with GAI Consultants, Inc.

- Provided supervision, inspection, and testing activities related to extinguishing the Percy Mine Fire under contract to the Pennsylvania Department of Natural Resources.
- Provided QA/QC inspection and testing activities related to the downstream dam embankment stability enhancement of the Indian Lake Dam, Somerset County, PA.
- Provided QA/QC inspection and testing activities related to construction of a Flue Gas Desulfurization facility and a 542 foot chimney at the Cheswick Power Station.
- Provided supervision, inspection, and testing activities related to securing clean cover and removal of contaminated materials unearthed at the Nine Mile Run Development under contract to the Redevelopment Authority of Allegheny County.
- Provided site inspection, evaluation, and design activities related to the elimination and/or passive

treatment of acid mine drainage at Fishing Run (Chartiers Watershed), Thompson Run Watershed, and Berwin Mine 33 (Winbur).

Additionally, since retirement Mr. Bickerton has been active with Protect Elizabeth Township as summarized below:

- Secured and set up equipment and monitored Protect Elizabeth Township's PM2.5 and VOC monitoring program for the past three years.
- Provided testimony on several occasions to the Allegheny Health Department and Elisabeth Township Commissioners and Zoning Hearing Board related to proposed installation of a gas fired energy facility in Elisabeth Township.
- Provided testimony on several occasions to Elisabeth Township Commissioners, Zoning Hearing Board, and Planning Commission to proposed installations related to unconventional well installation in Elisabeth Township.
- Provided testimony on several occasions to the Allegheny County Health Department and the City of Clairton regarding the USS Clairton Coke Works.
- Provided testimony to West Deer Township Commissioners regarding proposed installation of unconventional well installation in West Deer Township.

Summary

Mr. Bickerton has 34 years experience in the fossil generation environment including extensive experience in fossil fuel power generation, synthetic fuels, flue gas desulfurization, and waste management operations. Additionally Mr. Bickerton has 9 years experience in extinguishing mine fires, reclamation of brownfield sites, and performing QA/QC activities related to major construction activities. Mr. Bickerton also has experience in air quality monitoring in Elisabeth Township and the surrounding communities.

Publications

Secondary Dewatering of FGD Slurry with Centrifuge at Elrama Power Station, with Wei-Chung Yu, Conversion Systems, Inc. and Ronald R. Bevan and David L. Milligan, Alpha Laval Separation, Inc.

DuqRete Material Testing and Design Manual, with W.J. Held, Duquesne Light Company, and P.E. Glogowski, GAI Consultants, Inc.

High Volume Ash Utilization in Highway Applications, with J.T. Cavello, J. K. Cool, M. W. Crigler, W. J. Held, R. L. Nelson, Duquesne light Company

Coal Combustion By-Product Utilization, presented to the Electric Power Research Institute.

Christine Graziano, AICP

e: studio.cgm@gmail.com/ph: 917.734.5386/Pittsburgh, PA

Professional Status

2006 - current - Certified Planner, American Institute of Certified Planners

Education

December 2022 (pending capstone completion), Master of Environmental Studies: Natural Resource Management, University of Pennsylvania

2004, Master of Landscape Architecture
University of Pennsylvania

1998 Bachelor of Science: Environmental Policy
SUNY College of Environmental Sciences & Forestry in association with Syracuse University

Relevant Practice

2008- current - Consultant, Regenerative and Strategic Design, Pittsburgh, PA
2020 - current - President, Plant Five for Life, Pittsburgh, PA
2013-2015 - Projects Director, Pittsburgh Green Innovators, Pittsburgh, PA
2012 - Adjunct Professor, 5th Year Urban Lab, Carnegie Mellon University, Pittsburgh, PA
2008-2009 - Principal Planner, Town of Southampton, NY
2005-2008 - Senior Planner, NJ Pinelands Commission, New Lisbon, NJ
2004-2005 - Senior Designer, Town and Gardens, New York, NY
2001-2002 - Design Intern, Margie Ruddick Landscape, Philadelphia, PA
2001 - Samuel F. Fels Fund Urban Design Award Fellow for Greensgrow Farm, PHL, PA
1999 - Assistant, Schumacher College, International Center for Sustainable Living, UK
1997-1999 - Ecological Designer/Projects Manager, Ocean Arks International, Falmouth, MA

Service

2003 - current - University visiting lecturer and design critic, USA, Europe, Middle East
2014- current - Board of Directors, Allegheny Land Trust, Sewickley, PA
2016- 2019 - Chair, Land Protection Committee, Allegheny Land Trust
2014 -2016, 2018- 2020 - Pgh Tree Tender and Neighborhood Lead
2011-2015 - Board Director, G.A.R.D.E.N Inc., Tucson, AZ
2011-2014 - Board Advisor, Assemble: A Community Space for Arts & Technology
2011 - Sustainability Volunteer, Phipps Conservatory, Pittsburgh, PA

Organizing and Facilitation Examples

2021-current Birmingham/Uptown Group Air Quality Conversations

With Breathe Project support, convened and organized 15 different entities in regular community meetings every two weeks to understand regional and localized air quality concerns with an initial and particular focus on emissions, permitted and fugitive, and related health/quality of life impacts from a riverfront asphalt production facility. The group continues to expand and intersect with other air quality advocacy in the county. Presentations are given also at outside community meetings to expand on the Group's findings and to gain input. An expanded understanding of pollution sources, effective and efficient techniques to document, monitor installs, and a strategic plan for each neighborhood has emerged from the work and future plans for implementation are underway.

2017 Blue Economy: Coffee, Mushrooms and Forests, Barcelona, Spain

A day-long hands-on event embedded within a community fair to teach systems thinking in the context of landscape regeneration and individual empowerment and participation in addressing localized environmental challenges.

2014 Solar Roundtable and Working Group Breakouts, Pittsburgh, PA

Co- convened with Pittsburgh Green Innovators and the City of Pittsburgh Office of Sustainability a curated and invited list of 20 participants from various sectors to inform the city on solar landscape discussions, current state of affairs and needs; developed follow-up survey and analyzed discussion findings. Organized and co-convened subsequent discussions with breakout groups.

2012 Guangdong Electric Power Design Institute Executive Education, Pittsburgh, PA

For Center for Building Performance and Diagnostics at CMU, co-organized a two-week long intensive series of lectures and site visits for a 20 person group from China to learn about integrated systems design as it applies to power generation.

2010 Regen: 1st Northeast Regional Regenerative Design Conference, Morristown, NJ

Program development, speaker acquisition, volunteer recruitment, marketing, promotional material and website development and day-of implementation event coordination with the Regional Plan Association. 250 + person event brought regulators, design professionals, activists and community members together to envision redevelopment opportunities in NJ Highlands.

Ex. 6 Personal Privacy (PP)

Ex. 6 Personal Privacy (PP)

EDUCATION

Wake Forest University School of Divinity, Winston Salem, NC, August 2010 – May 2013
Master of Divinity

Mercyhurst University, Erie, PA, August 2006 – May 2010
Bachelor of Science in Marriage and Family Studies
Sr. Carolyn Herrmann Service Award

PROFESSIONAL EXPERIENCE

Executive Director, Group Against Smog & Pollution, Pittsburgh, PA, September 2021 - Present

- Work with board in order to fulfill the organization's mission
- Oversee and assist in the development of all educational and advocacy programs of the organization
- Write testimony and deliver comments on a variety of air quality policy issues
- Meet with local, state, and federal governmental agencies to advance air quality improvement
- Act as the spokesperson for GASP at media and educational events
- Assist with the planning of fundraising events and educational workshops
- Build strategic partnerships with other regional organizations in order to enhance air quality
- Work with the board of directors to develop the yearly budget, strategic plans, and organizational policies
- Review and approve contracts for services
- Perform grant writing and grant reporting, and regularly meet with foundations to ensure continued funding and compliance with expectations
- Conduct other fundraising activities to sustain operating expenses
- Track organizational progress in achieving short, medium, and long-term goals
- Establish employment and administrative policies and procedures for all functions and for the day-to-day operation of the nonprofit
- Supervise & collaborate with organization staff

Project & Outreach Coordinator - Assistant Supervisor, Protect PT, Harrison City, PA, June 2020 - September 2021

- Develop grant proposals, budget research and preparation, including reporting for organization.
- Manage outreach to stakeholders about opportunities for public and program involvement.
- Coordinate the planning and completion of projects and campaigns that influence the outcomes of proposed gas infrastructure projects in local neighborhoods.
- Supervise development of outreach and educational materials in accordance with organizations mission and purpose.

- Provide meaningful supervision to staff and interns that creates a culture of respect and shared mission.
- Direct day to day operations including employee development plans, operational policy, and programmatic oversight.
- Investigate and analyze environmental regulations and assist in drafting articles and publications based on research.

Senior Pastor, Peace United Church of Christ, Hickory, NC, December 2013 – January 2020

- Designed and implemented a development plan that substantially increased annual giving, end of year gifts, and contributions to the endowment funds.
- Managed volunteers to six church committees and supported the committee chairs' leadership development.
- Strengthened authentic relationships between Peace Church, grassroot nonprofits, and other local churches.
- Supervised a four-person staff and a nine-person Church Council. Facilitated yearly staff/Church Council retreat and training.
- Organized a concise process for the church to be an organization of inclusion and belonging for all people regardless of race, ethnicity, sexual orientation, gender identity and expression.
- Authored and communicated weekly sermons that educated, inspired, and proposed actions to respond to current events and challenges.

Board of Governors, North Carolina Council of Churches, Raleigh, NC, January 2016 – January 2020

- Chaired the Resource and Development Committee that generated financial and volunteer resources from the Council's 6,200 partner congregations representing 1.5 million North Carolinians.
- Advocated for Interfaith Power and Light, immigrant farmworkers' rights, accountability for American involvement in torture, gun violence prevention, and the NC Sanctuary Coalition.

Board of Directors, Catawba Valley Interfaith Council, Hickory, NC, November 2015 – June 2019

- Collaborated with local faith-based leaders, business owners, and politicians to establish the interfaith council.
- Chaired the Social Action Committee that analyzed local social justice concerns and recommended responses for the Council.
- Directed the process to establish the Council as an incorporated 501(c)(3).

KAREN BORDAS GRZYWINSKI

Ex. 6 Personal Privacy (PP)

Ex. 6 Personal Privacy (PP)

PERSONAL STATEMENT

Have volunteered for more than 30 years to protect and improve public health and the environment in Southwestern PA

ENVIRONMENTAL VOLUNTEER WORK

Allegheny County Clean Air Now (ACCAN) (www.accan.org), 2014 to present

c/o Community Presbyterian Church of Ben Avon, 7501 Church Avenue, Ben Avon, PA 15202

- Co-founder and current president of grassroots environmental organization initially founded to protect public and environmental health of those harmed by the pollution from the Shenango Coke Works in Neville Township.
- Published booklet *Living Downwind*, to document the stories of 21 residents harmed by the pollution from Shenango
- Following Shenango shut down in 2015, have focused on 27 polluting facilities in the ACCAN airshed which the Allegheny County Health Department (ACHD) has characterized as the "County's Second Pollution Hotspot," second only to the Mon Valley
- ACCAN's collaborators include:
 - o Carnegie Mellon University Community Robotics, Education and Technology Empowerment (CREATE) Lab for camera installation, 24/7 camera documentation, and monitoring of polluting industries
 - In October 2021, the Environmental Protection Agency (EPA) used photographic data from the ACCAN-CREATE Lab camera (www.accancamera.com) to cite Metalico, Inc., a metal shredding facility in Neville Township, for three separate emissions at ,or beyond, the facility's property boundaries in a Notice of Violation and Opportunity to Confer.
 - ACCAN and CREATE Lab were awarded one of the inaugural Constellation Prizes in 2020 for Community Collaboration in Engineering for using camera technology to document industrial pollution and fighting for clean air. (www.constellationprize.org)
 - o Reducing Outdoor Contaminants in Indoor Spaces (ROCIS) to facilitate interventions for homeowners to reduce pollution entering homes and improve energy efficiency of heating and cooling systems
 - o The Breathe Project to promote better air quality regulations and industry accountability, and to create community outreach and circulate science-based air quality information in the community

Group Against Smog and Pollution (GASP), 2002 to the present

1133 South Braddock Avenue – Suite 1A, Pittsburgh, PA 15218

- Board member of GASP, an environmental non-profit group focused on air quality in Southwestern PA
- GASP Board is actively involved in directing education, legal work, and environmental advocacy in the region
- Ongoing projects include Mon Valley outreach, K-12 education, public education events, legal accountability, regulatory commentary, and online resources to educate the public on air pollution

Clean Water Action Neville Island Good Neighbor Committee, 1997-2014

100 Fifth Avenue – Unit 1108, Pittsburgh, PA 15222

- Committee member advocating for better regulation, accountability, and community respect from industries operating on Neville Island
- Good Neighbor Committee dissolved with the founding of ACCAN

EMPLOYMENT HISTORY

- Gainfully employed in various positions from 1978 to 1991
- Work history includes employment by Allegheny County, and consultant and contractor positions
- Last employed from 1989 to 1991 by the University of Pittsburgh Department of Mechanical Engineering as a teaching assistant/researcher/course project developer while completing courses and research for master's degree
- Left workforce to prioritize child rearing, family, and other personal responsibilities

EDUCATION

University of Pittsburgh - Swanson School of Engineering

Benedum Hall, 3700 O'Hara Street, Pittsburgh, PA 15213

- Master of Science Mechanical Engineering, 1993
 - o Master's Thesis - *Identification of Alternatives to Open Tank Vapor Degreasing (using Trichloroethylene) in Metal Parts Cleaning: A Case Study Evaluation of Cleaning Ability, Economics and Environmental and Health Regulations*
- Bachelor of Science Mechanical Engineering, 1984

Indiana University of Pennsylvania - College of Fine Arts

Sprowls Hall, 470 South Eleventh Street, Indiana, PA 15705

- Bachelor of Arts, 1978

INTERESTS

Family, creating and collecting quilts, gardening, restoring and repurposing furniture, art appreciation, piano

Manifest for Grant Application # GRANT13580525

Grant Application XML file (total 1):

1. GrantApplication.xml. (size 35778 bytes)

Forms Included in Zip File(total 6):

1. Form ProjectNarrativeAttachments_1_2-V1.2.pdf (size 16139 bytes)

2. Form SF424_3_0-V3.0.pdf (size 24228 bytes)

3. Form SF424A-V1.0.pdf (size 23077 bytes)

4. Form EPA4700_4_3_0-V3.0.pdf (size 22670 bytes)

5. Form OtherNarrativeAttachments_1_2-V1.2.pdf (size 16002 bytes)

6. Form EPA_KeyContacts_2_0-V2.0.pdf (size 37243 bytes)

Attachments Included in Zip File (total 20):

1. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1243-CreateLab_SWPA Partner Commitment Letter on RI Letterhead_Mar22.docx.pdf application/pdf (size 89691 bytes)

2. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1242-ACCAN Partnership letter.docx.pdf application/pdf (size 93079 bytes)

3. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1246-VCAN Letter of Support March 2022.pdf application/pdf (size 83989 bytes)

4. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1240-Gryzinski Resume.pdf application/pdf (size 84159 bytes)

5. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1241-Tsuhlares Hoffman Resume.pdf application/pdf (size 79335 bytes)

6. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1238-Campbell Resume.pdf application/pdf (size 118191 bytes)

7. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1239-Graziano Resume.pdf application/pdf (size 52360 bytes)

8. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1236-Arnowitz Resume.pdf application/pdf (size 159268 bytes)

9. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1237-Bickerton Resume.pdf application/pdf (size 108380 bytes)

10. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1247-PET Commitment Letter 3-24-22.pdf application/pdf (size 1300036 bytes)

11. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1248-BirminghamBridgeGroup_UptownPartnersLetter_Mar2022_REV.docx.pdf application/pdf (size 42238 bytes)

12. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1235-GASP
501c3 Status Letter.pdf application/pdf (size 105360 bytes)

13. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1244-
EPACommitmentPartnerLetter_ThreeRiversWaterKeeper_March2022FINAL.pdf application/pdf
(size 151448 bytes)

14. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1245-
Mon_Valley_EPA_Application_BP_Support032322.pdf application/pdf (size 137502 bytes)

15. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1251-CWF
letter of support March 2022.pdf application/pdf (size 207470 bytes)

16. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1234-
Quality Assurance Statement SWPA EPA Proposal.pdf application/pdf (size 55397 bytes)

17. ProjectNarrativeAttachments_1_2 ProjectNarrativeAttachments_1_2-Attachments-1253-
Final_RFP EPA-OAR-OAQPS-22-01.docx.pdf application/pdf (size 741672 bytes)

18. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1249-
CarlowU_Final_EPAGrantSupportLetter_GASP_March22.pdf application/pdf (size 92243
bytes)

19. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1250-UP
Letter of Support.pdf application/pdf (size 410989 bytes)

20. SF424_3_0 SF424_3_0-1252-Congressional Districts.pdf application/pdf (size 66025
bytes)

Ana Tsuhlares Hoffman

Ex. 6 Personal Privacy (PP)

I am an intuitive geographer with extensive experience engaging with various stakeholders using data-framed storytelling to support environmental advocacy.

Career

CREATE Lab, Carnegie Mellon University, Pittsburgh, PA

Director of Air Quality Engagement

April 2020 - Present

- Leading the effort to define the CREATE Lab air quality program and navigate it's real-time and future development to work for environmental justice. I establish and sustain key partnerships with citizen teams, environmental advocacy organizations, academics and scientists, and government representatives and agencies throughout the United States, but with a clear focus on Appalachia. I develop priorities and consensus within the CREATE Lab teams and integrate the program's various projects when appropriate. I document feedback loops from partners and stakeholders on tools that serve the public, non-profit, and environmental advocacy needs. I support and manage the software, hardware, and data aggregation teams to create and innovate. I connect lead developers to communities to support the justice-oriented culture of allyship throughout CREATE Lab.
- Co-leading administrative duties for CREATE Lab air quality projects, including budget development from multiple funding sources, including the Environmental Defense Fund, the Heinz Endowments and others, hiring and staffing for each project, and working within Carnegie Mellon University to process funding acquired.

Actions I take in my position as Director of Air Quality Engagement include:

- Coordinating and supporting citizen science efforts throughout Pennsylvania, Ohio, and West Virginia using community-owned tVOC and PM monitoring networks, and modeled pollution path visualizations in partnership with organized community advocate groups, the American Geophysical Union, Environmental Health Project, and Environmental Integrity Project, as well as others.
- Co-designing permitting, and air quality monitoring policy recommendations with individuals from communities affected by unconventional oil and gas extraction and development, and supporting engagement between community partners and EPA Region 5, Ohio EPA, Ohio Department of Health, and Pennsylvania DEP.
- Establishing partnerships to strengthen local data communication work and contribute to similar efforts throughout the US. Partnership examples include Detroit AirNet based from Wayne University, Healthy Gulf and the Air Emissions Environmental Justice Working Group in Louisiana, and advocacy teams in the San Francisco Bay Area to name the most active.
- Seeking new funding opportunities to expand and support the CREATE Lab air quality program, which entails writing and processing proposals. Currently, writing a proposal for the EPA grant competition for Enhanced Air Quality Monitoring Funding under the American Rescue Plan with citizen team partners in Belmont County, Ohio.
- Organizing and facilitating several workshops and events to introduce new data access and visualization tools, namely, EnvironmentalData.org, PlumePGH.org, and VOC.createlab.org

- Representing CREATE Lab air quality work in media and at events facilitated by partner organizations to promote environmental advocacy and learning. Most notable upcoming and past events are: “Preparing for Petrochemicals” with Beaver County community (December 8, 2021), “What’s that Smell?” with Energy and Environmental Law Society at the University of Pittsburgh (November 11, 2021), and “Making the Invisible Visible” with Concerned Ohio River Residents and Freshwater Accountability Project (November 2020). Media interaction with Reuters, WESA, Public Source, Pittsburgh City Paper, Allegheny Front, and others.
- Maintaining the field network of Breathe Cams, tVOC monitors, and Spectrometers owned by CREATE Lab through sustaining community relationships as well as the physical air quality monitoring technology network.

Community Coordinator and Air Quality Monitor Technician

May 2016 - May 2020

- Managed the roles and complexities of the air quality sensor evolution, deployment, operation, and understanding
- Breathe Collaborative partnership building
- Met with a variety of community and organizational stakeholders to build trusting and sustained relationships around air quality sensor networks and then installed and maintained Breathe Cam and VOC monitor networks as a technician and analyst
- Mon Valley partnership outreach and public engagement marked by several public events’ planning and facilitation

Community Outreach Specialist

June 2014-January 2015

Boards and Organization Associations

Director of the Board, Allegheny County Clean Air Now (ACCAN)

December 2020 - Present

- Lead data analyst on the Board of Directors, providing data summaries and data collection support.
- Engaged with government agencies like EPA Region 3, Allegheny County Health Department, and multiple state and federal elected representatives to advocate for better enforcement of Metalico/Neville Recycling and Neville Chemical.

Member, Association of American Geographers

January 2013 - Present

Education

DePaul University, Chicago IL - Bachelor of Arts in Geography, and Art History with GIS Analyst Certification

August 2009 - December 2014

The Geography Department at DePaul offered an education focused on equity, geographic systems, and mapping.

- I presented my Appalachian Sacrifice Zones project, exploring the implications of depictions of Marcellus Shale natural gas maps at the Association of American Geographers Regional Conference in DeKalb, Illinois.
- I used GIS to map displacement in Chicago caused by gentrification as part of the ongoing work of Dr Euan Hague, department director at the time.

Congressional Districts

Program/Project: PA-014, PA-018